MR. O. THOMPSON
TRARALGON

Nasturtium officinale

(Rorippa nasturtium-aquaticum) Two-row Water-cress

1996 Dec Flowering in Railway Reservoir Conservation Reserve, Traralgon

2003 June Name change in 7th ed of Census

Neopaxia australasica
Montia

(Claytonia) australasica Now Montia

1970 Jan 1st. Flowering at Tamburetha Saddle. Small plant - matlike with white cuplike flowers on long stems. Leaves broadest at tip - all basal.

Jan 25th. Another form flowering on the Cobberas. Not far up where soil was plentiful, flowers were large and very waxy but on shorter stems than those at Bennison, leaves same only perhaps a little small. Still matlike & creeping as in large areas & very beautiful. Max says one of the sights of the weekend.

Further up on the rocky areas the plant was tufted not creeping, whole plant only 3 cm high but very close together 7 plants in 2.5 cm across in a straight line. Leaves thicker & darker green. Flowers on branched flowering stalk similar to above but shorter still - only 2 cm for the whole florescense.

1971 Jan 31st Flowering on Mt Howitt hike. Flowers almost 1.5 cm across. Branched flowering stalks. Individual flower stalks 1 cm long. Plants about 3.5 cm high.

1978 Jan. Synonymous Neopaxia australasica.
O. Nilss. Bot. Nat. Ser. 119 (3): 469 (1966)
[C. Beauglehole & R. Parsons]
Willis's book pub. 1972 uses Montia.

1996 Dec Flowering in Railway Reservoir Conservation Reserve, Traralgon.

2002 July 27 Growing in Bredrib Rd. Wetland.

2003 Mar Recorded in Eel Hole Ck/Cemetery Conservation Reserve Management Plan

granadensis

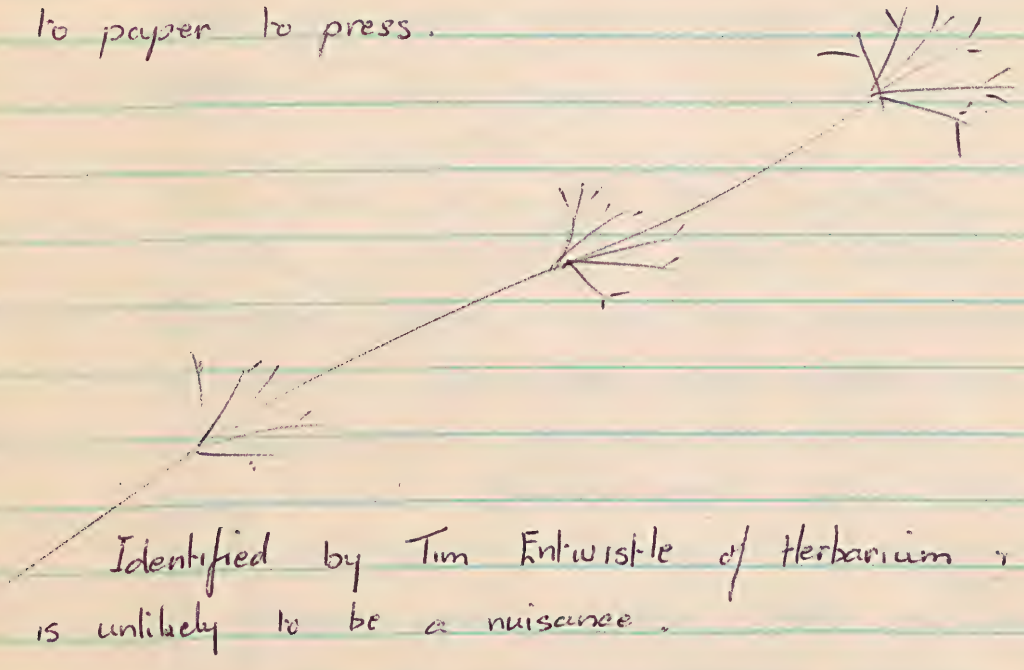
Nertera [depressa] Cushion Nertera

1971 Jan 30 Plants with red berries on the plains at Howitt Springs. Plant looked very like creeping Coprosmas but I think the difference is that the red "berry" is a hollow capsule with 2 rows of seeds in the middle. Identification by Mr J. Willis via Mr Morrison.

1972 Jan 30 Pale almost transparent yellow flower with straplike style. Flowering at Howitt Plains.

Nitella pseudoflabellata Muskgrass (Algae)

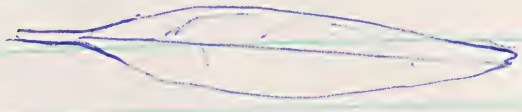
1993 June 29th. Plant growing under running water in Tanjil River. I think it may be an algae - either Chara or Nitella. Think it is Nitella as it is branched but don't know where it is supposed to branch - on the main upright or at the ends of the "leaves" in the whorl. Have pressed specimen and sent to Dr. Parson. Very like illustration in Helen Aston's book p. 27. English book mentions red "pimples" on stems & I can see them under the microscope. Stems etc appear one cell thick. Had to float it on to paper to press.



Identified by Tim Entwistle of Herbarium, says it is unlikely to be a nuisance.

Notelaea. ~~(Longifolia)~~ Ligustrina Privet/Mock Olive.

1969 May 2nd Miss Galbraith brought the berries of this plant to our meeting. Leaves up to 6 cm long tapering to both ends – the stalk end not so long tapering as the point – Pointed rounded. Leaves yellow green & much lighted + more yellow on back. Margins of leaves entire. Stalk of leaf ± 7mm long. Centre vein quite distinct but lateral veins fainter.



Branches brought to meeting had white, crimson or blue berries on them Crimson ones tend to turn blue after a while. Berries 1 cm wide and almost 1.5 cm long. Berries in clusters from leaf bases - cluster-stalk 2 cm long and stalk to each berry 1 cm long. Ovary of flower must have been superion as calyx is on stem side of berry. Calyx has 4 lobes. When fresh fruit were very firm but as time went by fruit became very wrinkled. Only one stone in each fruit and attached to stem. Berries on one branch all same color. Branches with white berries had as many as nine berries (opposite) in one raceme but the red + blue berry only had 3 or 4, though notches on stems indicate more. Branches quite woody.

1972 July 9th Crawling at Billy Goat Bend.
1973 June 23rd " " Darlamurla.

Notelaea venosa. large Mock-olive

1993 Jan 30 Plant growing in Errinundra area.

Nothofagus cunninghamii Myrtle beech

1968 Nov 23rd Beech trees flowering. Flowers small and ran color ~~blend~~ in with leaves & so ling as to be inconspicuous Under glass they are lovely flowers, see C.U. slide. Mr. Moretti also found orang fungi that grows on this tree.

1969 Nov 23rd. Could not see if plants were in flower but trees were truly beautiful with lovely brown new growth on road to Baw Baw

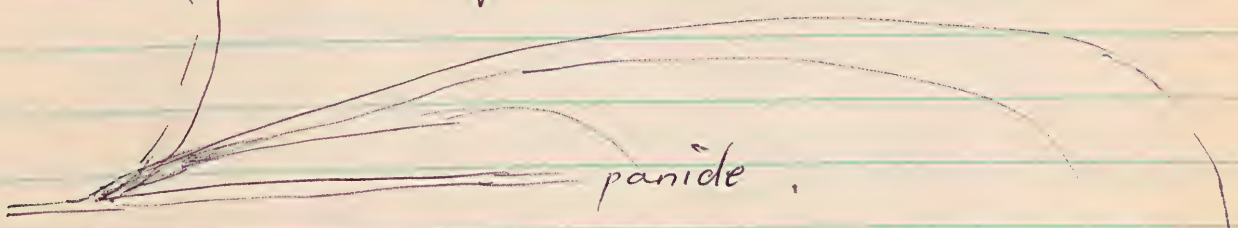
1972 Feb. Plants growing at Mt. St. Gwinear.

Notodanthonia longifolia

(Danthonia longifolia) Longleaf Wallaby Grass.

1992 Aug (?) Growing in Rosedale Railway Reserve west of station.
Another fairly heavy Wallaby Grass
Body of lemma with many hairs of two lengths
Lower part of lemma with shorter hairs than upper.
Lobes of lemma awned & exceeding upper hairs.
Branches of panicle scabrous.

1994 Oct 2. Growing at Munjara camp Glenmaggie. See grass book for description. Book calls points of bilobed lemma bristles & the genuflecting point the awn of the lemma. Awn twisting as it bends, then straight after that. Leaves come out of culm.



1996 Nov 9 Growing at Giffard Rifle Range.
Dec " Railway Reservoir Conservation Reserve, Traralgon.
2003 June Name change [illegible] Census.

Notodanthonia semiannularis

(Danthonia semiannularis) Wetland Wallaby-grass

1993 Dec 12 Collected on Railway Reserve near Traralgon,

2004 Nov 3 " " Newborough Bush.

2013 June [illegible]

Notothixos subaureus Golden Mistletoe

1957 Oct 6th. Plant growing on long-flowered Mistletoe (Dendrophthoe vitellina) along track from Alan Head to Cemetry. Whole plant golden with golden indumentum, veins on leaves not conspicuous. Leaves about ½" long opposite. Delicate plant. Mallacoota.

Leaf veins coming from base

Top surface of leaves darker & less golden than underneath.

Flowers tiny, golden with spreading petals, in clusters from leaf bases.

Nymphoides

2004 Feb. Article in Muellerica Vol 18 2003 on Seed morphology of Australian species of Nymphoides.

1997 In Muellerica Vol 10 1997 Helen Aston has new species.

Olearia arodenophora. Scent Daisy-bush

1973 Oct 28th Flowering at top of steps at Avon River in Channel Country.

1991 Oct 12th Flowering on Mt Heddrick & also down at road level. This is a very sticky plant. Flowers blush-purple. Involucre bracts ending in purple tips. Leaves linear ± 1" long and app. 2mm wide dark green above with revolute margins. Leaves rather thick in numbers and turning upwards in a curve.

1994 Nov 9th Recorded for Nicola weekend.

Olearia eglesa.

1990 Jan 28th Collected in flower on Gelantipy weekend with Bairnsdale Club. It was collected on the road past Wulgulmerang after the turn off on the right to McKillops Bridge and before the turn-off on the left to Benambra. It was on the rise after crossing a creek on the right-hand side. Write-up of specimen is under Olearia alpicola as that is what we keyed it out to. Correspondence from Dr Parsons on the specimen is over page.

13.v.91

Dear Bon,

Many thanks for the parcel.

a) Neville confirms your Bidens tripartita — many thanks, good record.

b) Neville is very interested in your large-leafed Olearia. These are being worked on at present. Your specimen may be the same as the Cobberas material marked on the photocopy, so we will send it to Lander in Perth for his view. Your collection could help him a lot.

c) Neville will write to you separately about the orchid.

Thanks again

Bob.

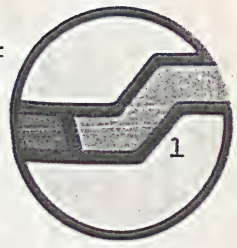
R.F.PARSONS
Botany Department
LaTrobe University
3083 Australia

Sincerely yours,

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

WESTERN AUSTRALIAN HERBARIUM

George St, Kensington, Western Australia
Postal Address: P.O. Box 104, Como, W.A. 6152
Telephone: (09) 367 0333 Fax: (09) 367 0515 Telex: AA94616



Your Ref:
Our Ref:
Enquiries:

Dr R.F. Parsons
Botany Department
LaTrobe University 3083

Dear Bob

Thank you very much for the *Olearia* specimen from Gelantipy for our collection here at PERTH where it hitherto been unrepresented. Apart from its conspicuously radiate marginal florets, it is a typical specimen of *Olearia aglossa* (Maiden & Betche) Lander. This specimen certainly supports my contention that *Eurybia alpicola* var. *rhodocaeta* will prove to be a synonym of *O. aglossa*. In the original version of my paper I actually cited it as a synonym, but bowed to a referee's caution to be more circumspect. In retrospect I wish I'd stuck to my guns!

Yours sincerely

Nicholas S. Lander
Principal Research Scientist.

24 May, 1991

Dear Bon,

Well Neville was right that we should send your specimen to PERTH. Bon would you mind filling out a new grid record card for it.? Then I could photocopy it & send the copy to Lander as a record of the locality, population size, etc. etc. Lander is faced with the job of having to revise all the SE. Aust. Olearias from a great distance away. — — — Cheers

Bob P.

La Trobe University

DEPARTMENT OF BOTANY TELEPHONE 4783122

13. V. 91

Dear Nick,

I endose an Olearia spec. as a donation in case it helps out with the problem on p. 148 of your recent paper. We would greatly appreciate hearing of your det. of the specimen. I can easily get further label details from the collector if needed. Gelantipy is in the eastern highlands N. of Buchan.

Cheers

Bob.

R.F.PARSONS
Botany Department
LaTrobe University
3083 Australia

Ex- LA TROBE UNIVERSITY
DEPARTMENT OF BOTANY – HERBARIUM

Olearia

Australia : Victoria : Gelantipy.

B. Thompson end of January, 1991.

4(2): 1991

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Olearia alpicola — Alpine Wattle

1972 Feb. Plant growing at Mt. St. Gwinear.
1977 Nov 26" " flowering at " " " . Flowers have no ray florets. In Miss Galbraith's book she said plants growing at Mt Kosciusko have no ray florets. Apparently this plant usually has ray florets

1990 Jan 28th Flowering on Wulgulmerang – Benambra Road. Also found plant without flowers near cabins at Gelantipy. Flowering plants were unusual. In this case the pappus consisted of many purple bristles. These were conspicuous as they are around the outside of the tubular flowers. I think this is usual for Olearia but can find no reference in any books to purple bristles. Leaves up to 14 cm long and 2 cm wide; dark green above, underneath woolly hairy dense and look as if they are attached together at base but rather in clumps than in stars, margins revolute, shape lanceolate with tiny curved hook on point; mid vein very prominent but lateral veins also obvious, after that reticulated Branches as underside of leaves. Flowers in clusters on stalks 2" long, terminal. Only 3 ray

to a flower group. Single flower group looks more like a eucalypt flower except that it is the pappus bristles instead of stamens. Calyx, or should I say involucre in Compositae, has pointed bracts in 2 rows 1-6. Single flower has achenae at base with pappus bristles erect, purple & spreading like funnel. In centre of "funnel" is tubular flower. Pappus bristles numerous app. over 30 but could be more.

1994 Jan 15th Flowering at Mt St Gwinear.

1997 Jan 18" Plants in seed along Livingstone Ck Track near Omeo

1999 Jan 23rd " growing on Gelantipy weekend.

2005 Jan 24" Members brought back specimen from the Errinundra weekend.

Olearia argophylla (Musk)

1967	Dec 23rd	Flowering	Morwell National Park.
1968	Nov 23rd	"	Bulga Park
	Dec 22nd	"	Morwell Nat: Park
1969	Dec 15th	"	along Jeeralang Rd.
1970	Nov 23	"	at Lilly-Pilly Gully.
	25	"	at Briagalong.
1971	Jan 17th	"	along road at Mt Useful.
1972	July 22nd	Plant	growing in Fairy Dell.
1993	Jan 3rd	Flowering	in Errinundra N.P.
1994	Nov 9th	"	on Orbost weekend
1995	Jan 15th	"	" Dargo "
	Oct 25	"	" Mt. Heddrick
1997	Jan 18th	Plants	growing on Mt Nugong.
	Apr 5th	"	" in APM Reserve - Grand Ridge Rd.

Olearia asterotricha (Rough)

1969 Oct 12 Flowering at Tymong. Standing about 3ft high but only straight branch. Flower about ¾" across with centre disc flowers also mauve. 17-18 Ray florets. Flower of ray florets tubular with pyramid (pointed) of dark green in centre, pyramid covered with long twisty hairs. Both ray florets & disc florets with pappus ~~lower~~ or as high as the tubular section and the pappus with hairs(?) pointing downwards & fairly close together. Stamens obtuse at base, stigma divided with pimples on out side particularly at top but flat & smooth inside. Edge of stigma with tiny pimples but needed higher magnification to seen them. Tubular flowers with "petals" stigma & stamens on one flower.

One ring of ray florets and only one ring of bracts on the involucular. ~~to~~ They do not appear to overlap but only meet. leaves app. ½" long and ⅛" wide at widest sections. Leaves thick, dark shiny above lighter below with edges curved under to give the effect of being lobed

leaves thickly on stem mostly alternate around the stem but sometimes quite congested.

Stem woody & dark brown.

Flower stalked at end of long branch. Two other buds also at end of same branch. Two leaves or bracts on flower stalk ⅓" long & 1mm wide & entire.

Leaves above & below & stem with short stiff hairs

1999

In Muellena Vol. 12(2) 1999 new species of Olearia O. stenophylla which is separated from O asteroticha is described. Mostly up near Tumut in Kosciuszko N.P. P. 223.

Olearia axillaris

1970 Mch 7th In bud along the shoreline at Sandy Point near Walkerville. Strong smelling plant. Stems & backs of leaves whitish & buds at axils of leaves. Imagine plant will be mass of flowers when out. Buds opened up at home & flowers had no ray florets. just yellow flowers & not many in each head.

1978 Apr 28th In seed at Wreck Beach.

Olearia ciliata — Blue Daisy-bush

1969 Sept 4th. Flowering near Rubbish Tip at Wilson's Prom. Lovely blue daisy with many ray florets. Bush just low branches near ground flower on stem 6" long, daisy about 1" across. Leaves tiny, dark + dense, plant branched. Area had been slashed so bushes may have been cut off.

Olearia decurrens

1973 Sept 4th Plant growing in Whipstick.
Leaves [illegible]. ~~Sides~~ Ridges down
branches. Buds axilliary on stems. at
leaf bases.

Olearia Erubescens

1970 Jan 24th Flowering at Wulgulmerang. Ray florets 4 to 5. Flowers on long stems $\frac{3}{4}$" to 1" long, and flowers app. $\frac{3}{4}$" across. Flowers from leaf bases giving branch a dense appearance. heaves up to 1" long widest at tip and slightly toothed only about 4 mm at widest part, dark green above but greyish white ~~above~~ below with brown hairs

1972 Jan 30th Flowering at Mt Hewitt.

1978 Nov 9th Flowering Old Callignee Road.

1984 Oct " on Gipsy Point ~~area~~ trip

1991 Jan 29th " at Gelantipy Weekend with only 2 or 3 ray florets. Some of the pappus were shaded pink.

1992 Jan 25th Flowering up near Buckley. Plains. Flowering stalks on peduncles

1993 Jan 31 Flowering in Errinundra NP.

1995 Jan 15th " on Dargo weekend.

1996 " 20th " " Dargo " at Paw Paw Plain.

1997 " 18th " " Livingstone Ck Track near Omeo.

1999 " 23rd " " Gelantipy weekend. Identified from specimen brought back.

Olearia floribunda — Heath Daisy-bush

1968 Jan 18th Flowering at Baw Baw. Small bush about 2ft to 2ft 6" high with tiny leaves, dark green & thin and white flowers with nearly always 3 petals. We did find one bush with one flower & it had 4 petals. Found many bushes this time.

1970 Jan 26th Flowering along road to Benambra. Plants low up to 3ft high. Leaves small under ½" in clusters, dark green. Stems woody. Flowers app. ½" across with 2–3 petals, flower stalks much branched in dense heads at ends of branches.

1971 Jan 30th Flowering at Howitt Springs and on Mt Howitt Hike.

Sept 2nd Plant with few flowers was found in Grampians But not sure of identification and flowers had very few ray-florets (about 3) and certainly small leaves. (See Willis)

1972 Jan 30th Flowering at Mt Howitt.

1992 Jan 25th " up near Buckely Plains - Flower heads singly at ends of short lateral braches. Branches can be much branched but flowers still singly at ends. Flowers ripened when pressed. Only 3 petals per flower.

1994 Jan 16th Flowering at Mt St. Gwinear & Mt Erica.

2006 Jan 4th " " Baw Baw.

Olearia frostii Bogong Daisy-bush.

1974 Jan 29th Flowering at Buckety Plains. Flowers blue. leaves thick whitish due to dense hairs on both surfaces. Plant only about 2ft high.

1992 Jan 25th Flowering at Buckety Plains & also up near Mt McKay.

1996 Jan 20th Flowering on Mt Hoch track on Hotham weekend

Olearia glandulosa. (Swamp)

1970 Feb. 11th Dad brought home from work. Growing along highway in swampy area near Morwell. Flower small white in much branched head. Erect bush with long narrow leaves (1" or more) dotted with green glands – can be felt quite easily by running fingers along leaves. Petals of flowers fairly narrow, centre of flower small.

April 4th Still flowering near Churchill.

Oct 8th Flowering on railway line near Morwell.

1971 Jan 17th " at Springs near Mt Useful.

1987 Sept 24th Plant growing on Harrup's Highway in creek area.

1991 Jan 26th Plant growing along Tulloch Ard Road near Cleeantipy.

Olearia glutinosa (Sticky Daisy-bush

1970 Mch 8th Flowering on shoreline at Sandy Point near Walkerville. Leaves dark-green, narrow about 1" long with pale mauve flowers approx ¾" across with 20-30 ray florets.

1980 March 29th Flowering at Point Symth ~~on the ocean~~ on the ocean side at No 4 Beach. Ray florets much fewer 6-8 with smaller darker florets on some center tubular flowers; giving flower unusual daisy appearance . Flowers singly from leaf bases near top of branchlet giving appearance of leafy cluster. Flower shafts about 3/4" long. Leaves when pressed have sticky feeling.
Growing on dunes facing ocean. These were small bushes to 3ft high but conditions were rather severe.
Illus. in Garnet's book.

2006 Sept 30 Flowering at Mt Heddrick.

Olearia iodochroa. Violet Daisy-bush.

1989 Sept 16th. Flowering on way down from Mt. Elizabeth. (? Playground area)
Many tiny leaves app. 1 cm long, shiny above paler below. Daisy-flowers pale purplish ¾" dia terminal, singly on short branchlets. Flowers nearly stalkless. Centre purple, not yellow, many tubular flowers male + female (unisexular) ray flowers neuter.
Shrubs only about 2 ft.

1999 Jan 24th Recorded on Cleland-Joy weekend. Identified by James Turner.

O

Olearia Lirata (Snow)

1966 24 Sept Flowering Darlamurla
30th Oct " Rifle Range
1967 Oct 13th " at Labertouche.
Nov 5th " " Stoney Creek. Thin leaves wrinkled, smooth to touch.
1968 Oct 29th Flowering Home Bush.
Nov 23rd " Bulga Park
1969 Nov 2nd " at Briagalong.
Dec 15th " " Jeeralang Rd.
1970 Oct 17th " " Briagalong.
1971 Oct 10th " Callignee Sth Rd.
Nov 12th " at Reid's Corner
1972 Jan 30th " at headwaters of the McAlister River.
Feb " at Mt St. Gwinear
July 22nd Plants growing at Fairy Dell.
1993 Jan 31 " " in Errinundra N.P.
1994 Nov 26 " " APM block Stradbroke Sth. Gipp. H'way.
Oct 28th " " T'gon Sth Reserve
Nov 7 " " Lacola weekend
1995 Apr 12th " " Drouin Water Reserve
~~Apr~~ Jan 15th " " Dargo weekend.
Oct 25 " " Mt Heddrick.
1997 Apr 5th " " in APM Reserve - Girand Ridge Rd.
2000 Dec 3rd " " Sweetwater Ck. Reserve.
2001 Aug 27th " " Newborough bush.
Oct 21. Flowering in Newborough bush. We were not happy about this identification as the leaves were not as big as usual for O. lirata & the flowers grew down the branches in small axilliary clusters & sometimes growing on just the upper side of the branches. The pedicles also appeared longer than usual for O. lirata. The leaves were dull rather than shiny but definitely the right

shape + venation for *O. linata*. leaves with acute points
I was to pleased to read at the end of the paragraph
on *O. linata* in Flora of Vic Vol 3 P 597 "Very closely
related to *O. phlogopappa* with some specimens
appearing intermediate between the two species." So I
imagine that is what these specimens are,

2001	Dec 1	Flowering in Sandy Ck bush, Newborough.
2004	Apr 3	Growing on Colley's Rd. Block.
2006	Sep 30	" " Seneris Track
	Nov 4	" " Springsure area
	Sep 9	" " Foster.

Olearia Megalophylla — large-leaf Daisy-bush

1969 Feb 6th Flowering at Erica. large daisy bush, large leathery leaves, silver + brown on back.

1970 Jan 5th Flowering along Licola Rd. There were some plants variegated.

Jan 24th Flowering at Wulgulmerang.

25th " at the Cobberas.

1971 Jan 17th Flowering at Springs + on Mt Useful. leaves very leathery + shing above. Underneath very silvery in mature leaves but with distinct maroon coloring on young growth making a handsome plant. Flowers in large cluster with quite long stems.

Jan 30th Flowering at Howitt Springs and did not notice the red colouring of plants at Mt Useful.

1972 Feb. Flowering at Mt St. Cuvinear

1992 Jan 25th " up near Buckely Plains.

1994 Jan 16 " at Mt. St. Cuvinear + Mt. Erica

1995 Jan 15 " on Dargo weekend.

1997 Jan 18th " " Mt Nugong.

Olearia Myrsinoides (Silky)

1961 Jan 18th Flowering at Tarra Valley just by pavilion. Leaves dark green above and definitely silver below. Only few ray florets to each ~~flower~~ head but flowers in large clusters. (Suspect this was O. Argophylla)

June 20th Found shrub on King Hway. If above is correct it must be very variable shrub. Specimen here leaves 1.5 cm, almost 1 cm wide, very toothed + wavy. dark green above + silver below. Stems very silky. Toothed leaves gave branch feel of raspwork. Leaves broadest at tip + alternate.

Oct 22nd Flowering Cormandale Reserve

Nov 12th " "

1964 Jan. 2nd " near Tyers down W3. Have found many plants near home but none flowering. Most plants about 2ft high. leaves about ½" long, broadest at tip with short thick stem. leaves dark shiny green above + silky white beneath; serrated margins + main vein very conspicuous. Flowers with very few ray florets, one plant with only 2 florets to each flower but most bushes with 3. Flowers in a raceme with stalk ¼" to ½" long before flower stalks. Flowers from leaf bases 3 to 4 flowers in each raceme. Flowers ½" across white with very heavy aroma. Stems of plant + flowers

almost white probably due to silkiness
leaves alternate. Flower fairly long about ½"
from back to front. More than one ring of
involucular bracts.

1970 Jan 18th Flowering at Seninis Track
Jan 15th " " Nicola Rd.
24th " " Wulgulmerang.
Oct 17th " " Briagalong
1971 Jan 17th " " Mt Useful road.
Jan 30 " " Hewitt Springs
1983 Dec 11th " " entrance to Seninis Track
1990 Nov 20th " " Toongabbie North / Cowwarr area.
1999 Jan 23rd " " Gelantipy weekend. Identified
from specimen brought back
2001 Dec 1 " in Sandy Ck bush, Newborough.
2005 Jan 24th Members brought back specimen from the
Errinundra weekend.
2006 Sept 30th Growing at Seninis Track

Olearia Phlogopappa. (Orway)

1967 Feb 6th Flowering at Erica. Daisy Bush with lanceolate leaves - dark green & rough (because of many veins) on top, smooth & white underneath 1" to 1½" long. Flowers in umbels.

Nov. 8th Flowering Callignee 3rd Rd. Flower stalks very long & flowers usually on upper part of branch ~~[illegible]~~. Centre of flower yellow.

26th Flowering Bill Onley's Rd. 5 ft high & beautiful circular bush.

Dec 23rd Flowering Morwell National Park

1968 Jan 18th " at Baw Baw but plants much more ~~dwarfed~~ dwarfed only about 3 ft high.

~~Sept~~ 17th Flowering on Callignee Road.

Oct 13th In bud at Stoney Ck, Cowwarr.

Nov 3rd Flowering Jeenis Track

1969 Oct 12th " in Warragul area

Nov 2nd " at Briagalong.

Dec 15th " along Jeeralang Rd.

1970 Jan 25th Var. flavescens. Flowering at the Cobberas

Mch 10th Mrs Lyndon reports this plant growing in bush at Waratah Bay.

1971 Jan 17th Flowering at Springs at Mr. Useful.

30th " on Mt Howitt Hike. This plant was VAR. subrepandia. Flower stalks still very long. Leaves only 1" long

or less. Flower head more circular than usual in lowland variety.

1972 Feb var. flavescens Plants growing at Mt. St. Gwinear.
1993 Jan 31 Flowering in Errinundra N.P.
1994 Oct 28 " " Tgon Sth Reserve
1995 Jan 15th var subrepandra Dargo weekend.
1996 " 20th " " Hotham " at village.
1997 " 18 " " Mt Nugong + Mt Baldhead.
1999 Oct 23rd " " Gellion's Run.
2002 Nov 23rd " " Holey Plains State Park.

OLEARIA

Muelleria Vol. 10 2004

The name *Olearia phlogopappa* var. *subrepanda* has long been misapplied, at least in mainland Australia. The variety is apparently confined to Tasmania. The mainland plant to which the name has been applied is endemic in higher subalpine and alpine areas of N.S.W. and Victoria. It is described as a new species *Olearia brevipedunculata*. The article states *O. brevipedunculata* differs from *O. phlogopappa* and closely related species in the smaller concolorous leaves and terminal, solitary, sessile or shortly pedunculate heads of flowers and gives detailed description of this new species.

Olearia pimeleoides

1972 Aug 28th Flowering near the little Desert.
low shrub about 2-3 ft. Flowers white
at ends of small branchlets. – about 8 rays.
Flower about ¾" across. leaves very small
app. 3 mm, oval shaped. Underneath side of
leaf & branches hoary or whitish. leaves spreading
and then upwards ⤴, some just straight.

Olearia ramulosa (Twiggy)

1967 Nov 5th Flowering at Cowwarr
1968 Jan 28th " " Wolfe's
Apr. 13th " in APM Bush, behind house, in gully where wattle tree was. Could this be because of rains after long dry spell. Weather has been warm.

Small flower (about ½" across) with sparse petals, between 5 + 7 on this specimen, long involcular ¼" +. Petals curl backwards exposing centre. leaves dark green, small ¼ to ½" long, lighter green underneath, margins revolute. One larger leaf + many smaller ones from one point on branch. Branched, spreading shrub.
Flowers coming from leaf bases on branches, almost stalkless. Perfume light, sweet + distinctive.
Centre consist of many short white little flowers with turned back "petals" and some long tubular brown flowers with divided pistle protruding from tube. The out side of short buds surrounded by very fine hairs (or some such) half the length of the bud. Very difficult to observe because all so small. Very fine hairs are achene + barbed but not plumed on out-side of tube containing pistle which protrudes far above the achene. Tube turns back to expose pistle + looks like little flower. All above is attached together + can be pulled from centre of flower.

Nov 17th Flowering along Call. Road.
1969 Jan 26th " " " "
Feb 23rd " " " "
Mch 1st " " " "

Olearia ramulosa. (cont-)

1969 Mch 30th Just a few flowers left now, most just brown.

May 9th Plants still with few flowers on & have had since last report.

May 18th Flowering at Wilsung South.

Nov 2nd " " Cowwarr.

1970 Mch 7th " in heath lands near Walkerville. Plants covered densely in flowers.

Apr. 4th Still flowering near Churchill.

9th " " along road to Venus Bay.

1971 Jan 30th Mr H. Morrison reports this plant for the Mt Hewitt Weekend.

Miss Galbraith identified blue flowered daisy-bush Ellen brought back as a variety of ramulosa. (var. stricta)

Sept 2nd Flowering on McKenzie Falls trip in the Grampians.

1972 May 28th Plant flowering at Little Desert. leaves small up to ½" linear with revolute margins, dotted with stiff short hairs. Branches very hairy with stiff short hairs. leaves with more than one together sometimes. Flowers almost stalkless from leaf bases towards ends of branches. at Mt Arapiles.

1990 July 29th Flowering at Gravel Reserve in same district as 213a Parish of Rosedale.

Nov 20 Flowering at Toongabbie / Cowwarr area.

Olearia rugosa Wrinkled Daisy-bush.

1991 Sept 8th Flowering near sewerage plant at Mallacoota.
This specimen does not appear typical as the leaves are revolute which gives them a narrower look than the specimen Ollie photographed at Promontory.
Hairs on back of leaves appear stellate but not densely covering leaf. Leaves 3+cm long but only app 4mm wide without spreading revolute margins.
Think margins may be sparsely toothed. Upper surface of leaves shiny with bulging between prominant veins with sparse stiff hairs.
Branches with fine short hairs + one ridge in front.
Flower stalks with much smaller leaves at base.
Flower stalks app 1cm long, hairy, greyish green.
Flowers only one stalk with flower but many buds at base, very small.
Involucre 3 rows of bracts, hairy with brown tips. Ligules < 1cm slightly burgany at ver tip otherwise creamy white. app 20 ligules. Achenes ~~neglect~~ rigged + hairy; dark brown, pappus with very fine + tiny barbs. Flowers app. 2cm diam.
Sent to Dr. Parsons for verification. Neville Scarlett
~~1991 Nov 23~~ agrees it is O. rugosa but says Costermanns says O. rugosa integrates with O. lirata + this specimen may be part of the integration.
1991 Nov 23 Flowering at Haberlouche. Report in A.V. Naturalist Dec 1991 states who was recorded as O. stellulata should be O. rugosa.

Olearia Stellulata (Starry)

1967 June 20th King Hway. leaves wavy toothed, lanceolate, up to 4 cm long, 1 cm wide, dark green above, silver & hairy beneath, alternate. Stem angular & hairy

Oct 13th Flowering at Labertouche. Rough to touch caused by groups of hairs.

1970 Nov 25 Flowering at Briagalong.

1978 Jan. This species is not recorded now for Victoria [C Beauglehole & R. Parsons]

1991 Nov 23 Flowering at Labertouche. Recorded in census. Ron Carey states O. stellulata should be O. ~~rugulo~~ rugosa in write-up in Victorian Naturalist Dec. 1991.

1997 Oct 25th Flowering at Labertouche. Think both O. stellulata & O. rugosa are present and rather close together in bush. Specimen I brought home fits nicely with description in Flora of N.S.W p. 196 with illust^n in Vol. 3.

Olearia teretifolia

1973 Sept 3rd Flowering in Whipsticks. leaves very small about 2 mm. greyish, pointing upwards along branches. sessile flowers with 6 ray florets.

Opercularia hispida.

6.6.82 Plant with flowerheads in bud. Flower stalks over 1" with bract below flowerhead - appears to have 2 bracts at each flower in head. leaves pointed both ends with stem of $\frac{1}{2}$"; with hairs on both surfaces. Appears to have long silky hairs around edges + shorter soft hairs over leaf. Stems very hairy. leaves grow in pairs + then stems with new group of leaves. Spaces between each group of leaves.
Plants in Boisdale public land block.
Received specimens of seeds from N. Scarlet of both O. aspera + O. hispida.

O. hispida seeds - Back - more pronounced ridge down the back + roughness more rough with roughness running crosswise + elongated instead of lumps.
Front concave with honeycomb appearance with one rough ridge down centre but no ribs.

O. aspera. seeds Back rough lumps with backbone ridge.
Front concave with two ribs indented on both sides of the smooth ridges.

1989 Oct. 21st Plants growing on Morgan's Block near road to pines. Plants only about 5" high + seeds still immature so could not check them.

1990 Dec 15" Plants growing in Willung block on roadside. Fruit immature yet but definite single ridge to seed and honey-comb effect over rest of seed.

Operculania ovata

1973 Aug 25th Flowering in Borda Borda forest - flowers with quite long stems.

1996 Sept 7th Ken Harris records this species on Tramway Road at Significant Roadside area near Churchill.

Opercularia Varia

1964 June 11th Seed pods still on plant though empty. Angular stems, long distance between groups of leaves. Leaves 1.5 cm long, .5 cm wide, hairy, light underneath. Tough like spurge. Seed pods with protusions around cavities (could be hairs or soft prickles with fresh) seed pods appears like ball but is actually these cavities fitted together back to back to make ball shape Seed pod stem 1.5 cm long. As I remember some of the lower leaves were much bigger. Found at Granite Rock.

1968 Nov 10th Flowering along Clarke's Rd.

1969 Oct 4th " at Cowwarr.

1970 Aug 23rd " at Holey Hill Trig Pt.

29th " at Darlamurla

Oct 1 " " new reserve Rosedale

1993 Aug 25th " " Boola Boola

1994 Nov 26 Seeds in APM block Stradbroke Sth. Gipp. Hway.

Oct. 30 " in Dawson Railway Reserve

1995 Feb 15 Plants growing in A.P.M. Reserve. This plant was a very (slender fine) plant with the branches only ridge on one side and smooth on other so that they appeared terete unless closely observed. No wonder it is 'varia'.

Dec 12 Growing on Railway Reserve near Traralgon

2004. Nov 3 " " Newborough Bush.

2004 Apr 3 Growing in Colley's Rd. Block. Two different specimens; one stiff & dry & the other from a moist area very lax & soft. Plants with fruits on them.

Ophioglossum lusitanicum (coriaceum) – Adder's Tongue

1969	Aug 29.	Granite Rock. (with fruiting bodies)
	Aug 31.	Cochrane's Lane leaves just coming up
1971	Sept 3rd	Mt Arapiles on lower level.
1972	Jan 30th	Mt Hawitt area.
	Aug 21st	Growing at Mt Arapiles lower level again + many leaves on rocky face near picnic area

ORCHIDACEAE`

.Spiranthes - Spiral Flower - Austral Ladiy's Tresses. 1 species.
Cryptostylis - Hidden Column - Tongue Orchids. 4 species /2
Chiloglottis - Lip, mouth of windpipe - Bird Orchids. 6 species/4.
Lyperanthus - Mournful flower - Beak Orchids. 2 species/2.
Burnettia - Burnett, First Prof. of Botany at King's College , London - Lizard Orchid. 1 species/1.
Leporella - Hare - Fringed Hare Orchid. 1 species.
Caladenia - Beautiful gland - 59 species divided into 3 sections - Leptocerus (Hare), Caladenia & Calonema (Spiders)
Glossodia - Tongue-shaped - Waxlips. 2 species/1.
Calassodia (hybrid between Caladenia & Glossodia) 1 species in western Victoria.
Calaena - Caley , collector for Joseph Banks - Duck Orchids. 2 species/2.
Arthrochilus - Joint lip - Elbow Orchid. 1 species/1.
Pterostylis - Wing style - Greenhoods. 54 species divided into 9 main groups mostly by sepals, leaves, stem leaves & labellum.
Acianthus - Point flower - Mayfly & Gnat Orchids. 3 species/2.
Cyrtostylis - Curved style- Gnat Orchids. 2 species/1.
Corybas - Dancing Priests of Phrygia (who wore hoods apparently) - Helmet Orchids. 8 species/3.
Thelymitra - Female hat - Sun Orchids. 22 species/app. 9. Species are divided by shape & colour of column & brushes or column arms.
Calochilus - Beautiful lip - Beard Orchids. 6 species/4. (Mostly divided by labellum).
Diuris - 2 tail - Double Tails or after animals. 10 species/5.
Orthocerus - Upright horn - Horned Orchid. 1 species/1.
Microtis - Small ear - Onion Orchids. 6 species/3. (Mostly divided by labellum).
Prasophyllum - Leek leaf - Leek Orchids. 30 species that flower mainly in Spring.
Genosplesium - Race near (because like Prasophyllum only smaller) - Midge Orchids . 12 species ./2.
Gastrodia - Pot-bellied - Cinnamon Bells. 3 species/2.
Dendrobium - Tree life - Rock Orchids. 2 species far East Gippsland.
Sarcochilus - Flesh lip - Tree Orchids. 2 species/1.
Plectorrhiza - Plaited root - Tangled Orchid. 1 species far East Gippsland.
Dipodium - Two foot (2 pollen masses) - Hyacinth Orchids. 5 species/1.

ORCHIDACEAE

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Dipodium - Two foot (2 pollen masses) - Hyacinth Orchids. 5 species/1.

Oreobolus distinctus Fan Tuft-rush

1972 Feb. Plant growing at Mr. St. Gwinear

Oreomyrrhis argentea Silver Carraway

1995 Jan 15th On snow plain near King's Lookout on Dargo weekend.
This plant also grew on Tamboritha

1996 Jan 20th On Hotham weekend at King's Lookout turnoff snow plain.

Creomyrrhis Heripes

1972 Jan 30th Flowering at Mt Howatt.

Oreomyrrhis ciliata

1972 Jan 30th Flowering at Mt Howitt.
1996 " 30th " " Hotham weekend.

Oreomyrrhis eriopoda Carraway

1970 Jan 1st Almost in flower at Tamboritha Saddle All leaves basal, bipinnate. Flowers in umbells flat + spreading, buds grey, on long stalks.

Jan 24th Flowering at Wild Dog Creek Wulgulmerang. Flowers white.

1971 Jan 17th. Plants in seed at Mt Useful.

30th. Flowering on Mt Howitt Hike, plants in seed at Howitt Springs but did not remember any flowers there.

1972 Feb Flowering at Mt St Gwinear.

Jan 30th Flowering at Howitt Plains - tiny red flowers in clusters. Whole cluster 1/4" across. Quite a rich deep red colour.

1994 Jan 16th " " Mt. St. Gwinear.

1995 Jan 6th " " on Dargo weekend.

1996 " 20th " " Hotham " on snow plains

1997 " 18th In seed at Mt. Baldhead.

Oritas lancifolia (Alpine)

1967 Feb 6th Flowering at Erica - nearly finished.

1968 Jan 18th " " - Baw Baw. Leaves shiny yellow green lanceolate but about 1½" long & almost ¾" wide. Flowers cream hair-like a real grevillea flower without petals or they are so small as not to be noticeable.

1971 Jan 30th Plants growing at Howitt Springs and on Howitt Hike but did not see any flowers.

1972 Feb. Plants growing at Mt. St. Gwinear.

1992 Jan 26th Flowering in great clumps on Bogong High Plains especially near Cope Hut track but also up near Mt Mckay.

1994 Jan 16 Flowering at Mt St Gwinear & Mt. Erica.

1996 " 30 " " Hotham weekends.

ORNITHOPUS PERPUSILLUS Bird's-foot.

2002 Oct. 26 Growing in burnt area between Chester Park Rd & Powers Road in Traralgon South Flora & Fauna Reserve. This identification because flowers white & pink & calyx teeth ½ as long as tube. Plant growing in middle of bush area not along roadside. Very good illustration in Flora of Victoria P. 704 Vol. 3. Plant hairy - when young with 13 pairs of leaves without single leaf at end.

* ORNITHOPUS PINNATUS Sand Birds-foot.

1992 Nov 30th Flowering along 5th Gippsland Highway near Xanthorrhoea resinosa on side of road amongst the grasses.

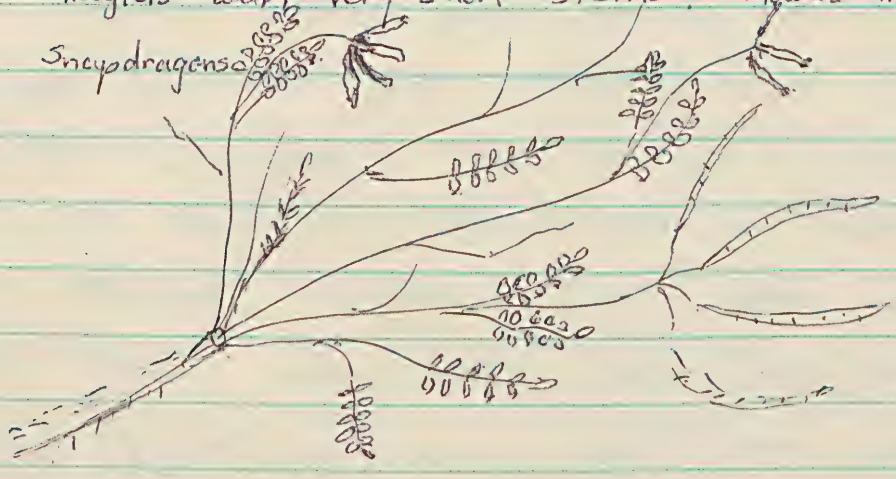
Sprawling plant with imparipinnate leaves - (in pairs with single leaflet at end), 5 pairs of leaflets.

Pod 3 cm long only slightly constricted between seeds.

Flowers < 1 cm long yellow veined with red. 3-4 flowers on long peduncle 5 cm long with flowers coming from central point. Flower cluster without subtending bract.

Plant glabrous with branches app. 24 cm long again coming from central area at ground level.

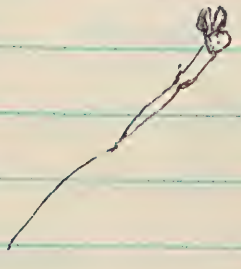
leaflets with very short stems. Flowers like tiny long Snapdragons.



Flower stalk very tiny. almost sessile.

Calyx lobes broad but acute.

Wings rolled over the keel.



Orthoceras Strictum (Horned Orchid)

1967 Jan 14th Flowering at pool on Anderson's Track – about ½ way along pool this year. In 1966 we found specimen at road end of pool and 3 specimen at other end of pool. Perhaps we were a little early as Austral Ladie's Tresses were only about 6" high yet. Also found horned orchid on slope 3mls from Early Rd. in area where tongue orchids were plentiful.

Scape:- 1 ft 3 flowers can be up to approx 3 ft.

Leaves:- 1 or 2 lanceolate. Flower stalk from middle. 2 leaf bracts

Dorsal Sepal:- Broad. hoodlike. 1 cm. maroon inside green outside

Lateral Petals:- Hidden under dorsal sepal. (Could these be maroon?)

Lateral Sepals:- Upright, well above hood. 18 mm. spreading each side

Labellum:- 2 lateral lobes – then expanding, then pointed.

Bends downward from expansion. Maroon with yellow patch in centre, then raised callus with ears at back in front of column and at base of labellum.

Column:- Triangular with sticky tip etc in centre.

Ovary:- Same size as lateral sepal 18 mm.

Each flower has ~~do~~ floral bract higher than dorsal sepal. Each flower faces inwards towards stem. so that floral bract is towards the outside.

1991 Nov 23rd Plant in bud under power lines in Labertouche Forest. This plant also grows at Edward Hunter Reserve.

1994 May 1. Plant in seed in land app. boundary of Austen's property near Darlamurla. Boundary on Darlamurla side of block.

Wedge-leaf Oschatzia

Oschartzia cunaifolia or Wedge-leaf Azorella

1970 Jan 24th Flowering at Wulgulmerang. Small 5' petalled flower with green ovary, very conspicuous in centre. Stramens raised + also very visible. Flowering stalk much branched but leafless. Seed apparently elongated. Leaves broad tipped & notched.

1989 Jan 14th Flowering at Wulgulmerang. Flower white.

1991 Jan 27th Recorded for Gelantipy weekend.

1999 Jan 24th " " " "

Ottelia ovalifolia Swamp. Lily

2000 Apr 11 Growing in Heyfield Wetland.

*Oxalis articulata Pink Wood-sorrel.

1997 Nov 23rd Flowering in Downies lane near Welch's gate.

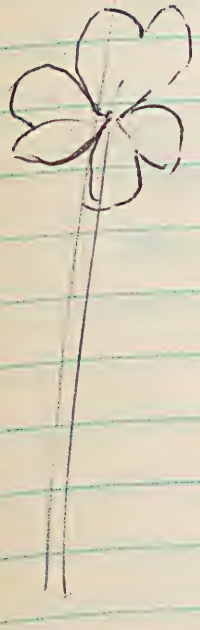
Plant with no stem leaves all radical

Flower pink, leaflets pubescent.

Leaves of 3 leaflets with deep notch.

Flowers on leafless stalk, in umbel form of 8/12 flowers of ± 1.5 cm across, deep pink in centre.

Peduncle & pedicles with scattered appressed hairs.



* Oxalis Corniculata (Pernicularg) (Wood Sorrel)

1966	24 Sept	Flowering at	Darlamurla
1968	Sept 3rd	"	Glenmaggie
1969	Feb 16th	"	Rosedale Reserve.
	Aug 29th	"	Granite Rock.
	Oct 18th	"	Rosedale.
1970	Oct 11th	"	Heyfield
1972	Jan 30th	"	Mr Hewitt. Mt Heddrick
1991	Oct 12th	"	AMM block Stradbroke Sth Gippsland.
1994	Nov 26	"	Tgon Sth Reserve
	Oct 28th	"	Casuarina " Fulham
	Nov 1st	"	Dawson Water Reserve
	Oct 30	"	Dargo weekend.
1995	Jan 15th	on	Mt Heddrick
	Oct. 25th	on	Hotham weekend.
1996	Jan 20th	"	Railway Reserve near Traralgon
1995	Dec 12	"	Heyfield Wetland.
2000	Apr 11th	"	Sandy Ck bush Newborough.
2001	Dec 1	"	

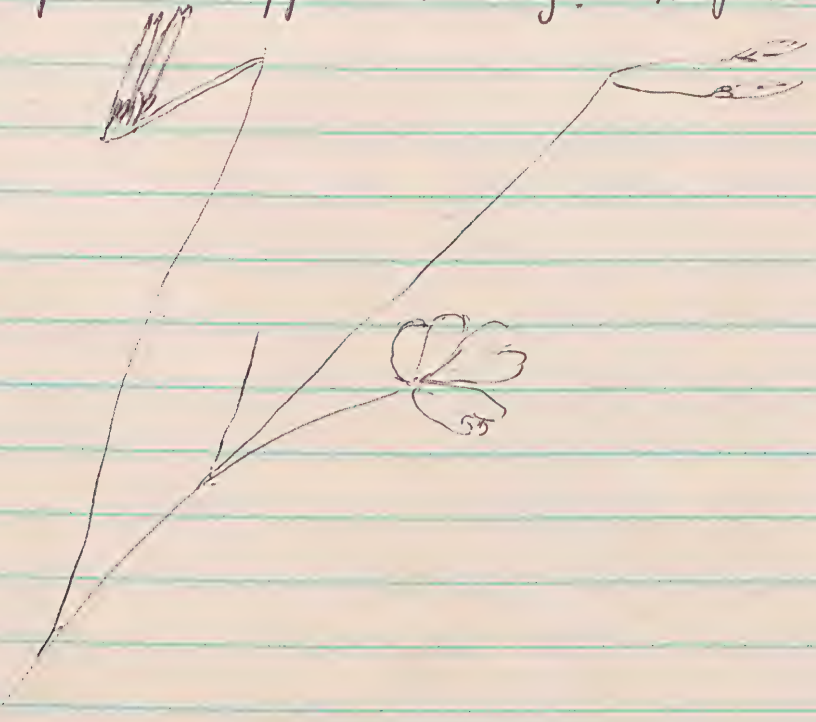
magellanica

Oxalis 'lactea' White Wood-sorrel

1972 Feb. flowering in bog at Mt. St. Ciwinear.
1973 Jan " at Mt Baw Baw
1973 Dec " " Mt Baw Baw. in profusion.

Oxalis perennans

1994 Feb. 26th Flowering at Dalray Beach. Stems & branches with antrorse hairs. Fruit long & slender 20mm x 2.5 app. Calyx lobes with hairs on margins. Fruit erect although bent downwards from main stalk & then erect. Flowers yellow. Didn't check root. Stipules obvious & hairy & pointed app 1mm long. Leaflets rounded



2003 Mar Recorded in Eel Hole Ck/Cemetery Conservation Reserve Management Plan

* Oxalis pes-caprae Sour-sob Wood-sorrel.

1994 May 1 Plant growing in Austen's property near Darkumurla.
Plant with purple on leaves.

Oxalis purpurea Large flower Wood-sorrel.

1997 Nov 9th Flowering at Knob Reserve Stratford.

Stems absent. Flowers singly on pedancle; purplish pink, yellow in centre. Petiole with scattered hairs

This is flower we called Four O'Clock Oxalis.

Oxalis thompsoniae "Fluffy-fruit Wood-sorrel

2003 Mar. Recorded in Eel Hole CK/Cemetery Conservation Reserve Management Plan.

Oxylobium arborescens Tall Oxylobium

1993 Jan 31 Just a very few flowers on plants in Errinundra N.P.

1999 Jan 24th Recorded for Gelantipy weekend.

2005 Jan 24th Members brought back specimen from the Errinundra weekend.

Oxylobium ~~Decumbens~~ ellipticum ~~Ellicifolium~~ Common Oxylobium

1967 June 15th Shrub with 2.5 cm long leaves 1 cm wide with a very sharp point 1 to 2 mm long with very wavy edges to leaves. Leaves opposite & hard. Back of leaves with hairs. Stem feel slightly rasping. Found near Eden.

1978 Jan 3rd Plant in seed on road not far from Hewitt Springs. Seeds in dense clusters on ends of branches. Plant very greyish leaves up to 1" long with definite point or at least midrib continued. Underneath of leaves greyish. Seed-boxes very hairy.

1980 Dec 7th Flowering at Tamboritha near hut. No stipules flowers in dense clusters. Leaves 1.2 cm long and 3 cm wide. Plant almost whitish from whitish short dense hairs. Upper surface of leaves green venation very articulate with tiny tuberculate.

1991 Jan 21st Plant growing on ~~Tolloch Road~~ Wulgulmerang / Benambra Road

1997 Jan 18th ~~Rio~~ Plant in seed at Mt ~~Baldhead~~ Nugong & Livingstone Ck Track.

~~Ozothamnus~~ Ozothamnus alpinus

(Helichrysum alpinum) Alpine Everl

1974 Jan 29th Flowering at Buckety Plains. Bushes about 3 ft high. Flowers white but bracts very deep red giving buds a dark appearance.

1996 Jan 20th Flowering on Hotham weekend on Mt Loch Track.

Ozothamnus conditus Spicy Everlasting

1991 Jan 25th Recorded for Ciclantipay weekend.

1999 " 24th

Ozothamnus cuneifolius

(Helichrysum Cuneifolium) (Riceflower L.)

1967 March 27 Leeds at Walhalla

1968 March 24th Plant with dried flowers on trip to Boola Boola Creek. Leaves 12 mm long 5 mm wide, dark leaf adhering to branch so as to give leaf a stalkless appearance. End of leaf rounded but main vein protuding past end of leaf in fine point. Leaves shiny dark green above with deep main vein. Back of leaf slightly downy with yellow green dull appearance. Leaves alternate. Branch grey colored. Flower much branched

1968 Dec 29th Flowering along road past Walhalla

1971 Jan 17th " along road to Mt Useful.

Aug 29th Plant growing in the Grampians.

1972 July 22nd " " " Fairy Dell.

1990 Nov 20th Flowering in Toongabbie North/Cowwarr area.

1991 Jan 26th Flowering on Tulloch Ard Road near Gelantipy.

1993 Jan 31 " in Errinundra N.P.

Ozothamnus ferrugineus

(Helichrysium Dendroideum) (Dogwood Tree)

1967. Nov 11th Flowering in A.P.M. bush behind house. This plant very cascading branches (Think now this is cascade everlasting)

Dec 31st Flowering Traralgon South Reserve Opp. O. Lades, along creek on our property, up bush paddock. These plants much more like dogwood only flowers have spreading bracts. Also Morwell National Park

1968 Jan 28th Along Red Hill Rd. in flower

Dec 6th Flowering in Garden.

Dec 29th " on road past Walhalla

1969 Jan 5th " Dead Horse Gully.

1987 Dec 26th " in bush past front gate.

Can be distinguished from Cassinea as flower clusters are more domed than Cassinea for the flowers also the branchlets from the main stem are almost at right angles and do not start to divide until the edge of the side flowers

Cassinea has aromatic definite odour to crushed leaves but Helichrysium just has green plant smell.

1993 Jan 30 Flowering along roadside between Combienbar & Club Terrace,

1994 Oct 28th Flowering in T'gon Sth Reserve.

1995 Apr 12th Growing in Drouin Water Reserve

1994 Nov 9th Flowering on Licola weekend.

1996 Nov 23rd " " Old Port Trail in Nooramunga Coastal Reserve

Dec " " Traralgon South roadside.

1997 Apr 5th " " APM Reserve - Grand Ridge Rd.

Ozothamnus obcordatus
(Helichrysum Obcordatum) (Grey)

1966 Nov. 20th Flowering along road at Cowwarr.
1967 Nov 5th " " " "
1968 Sept 3rd In bud. " " "
1969 Oct 4th Flowering " " "
Nov 2nd " " "
1970 Jan 24th " at Wulgulmerang.
Oct 11th " " Heyfield.
1971 Aug 28th " " Wildflower Sanctuary at Strawell
Nov 13th " " Cowwarr
1972 Jan 30th " " Mt Howitt
1990 Nov 20th " " Cowwarr
1991 Oct 12th In bud at Mt Hedrick
1994 Nov 1 Flowering in Casuarina Reserve Fulham
Nov 9th " on Nicola weekend.
1995 Oct 25 " " Mt Heddriek
1997 Jan 18th " " Mt Baldhead & Mt Nugong.
1999 " 24th Recorded for Cielantipy weekend. Identified from specimen brought back.

Ozothamnus rosmarinifolius

(Helichrysum Rosemarinifolium) (Tree)

1967 Jan 14th Flowering in swamp area opposite Waterlily pond, Yallourn Nth. Miss Galbraith says this is a very low altitude for this plant. We saw it up at Bennison Jan 1966.

Feb 12th Found flowering and much in seed. on Wolfe's property.

1968 Jan 28th " " but no seed on "

1970 Mch 8th Flowering in bush at Waratah Bay. We hope this is right identification, leaves lanceolate, turned under, white underneath + main stem white. This whiteness I think may have been due to hairs. Flowers in ~~bute~~ loose head. Leaves rough to touch.

Ozothamnus secundiflorus

(Helichrysum secundiflorum)

1967 Feb 5th Flowering at Erica. (Second leaves small.)

1971 Jan 17th " along road to Mt Useful.

1972 Jan 30 " at Mt St Cuninear.

1992 Jan 26 " near Buckeby Plain.

1994 Jan 16 " at Mt St. Cuninear & Mt Erica

1995 Jan 15 " on Dargo weekend.

1996 " 20 " " " Hotham "

1997 " 18 " " " Kirings/one Ck Track near Omeo.

2005 " 24 " Members brought back specimen from the Errinundra weekend.

Ozothamnus (hookeri) sp. 1.

(Helichrysum Hookeri) (Alpine Everlasting)

1967 Feb 6th Flowering at Erica. Leaves like cypress

1971 Jan 30th " " Howitt Springs.

Flowers yellow, stems white and leaves dark green, embedded in white stem. Flowers actually terminal on short branches, thus flowering right down branch.

1972 Feb. Flowering at Mt St Gwinear.

1994 Jan 16th " " " " " & Mt Erica

1995 Jan 15th " on Dargo weekend.

1996 " 20th " " Hotham "

Ozothamnus stirlingii

(Helichrysium stirlingii) Ovens Everlasting

1990 Jan 8 Flowering at Mt. Buffalo. on walk to Underground River. Plant about 4ft high; leaves flat, pointed. >2 cm long. Flowers lovely white, branches viscid. The centre of the flower much larger than the ray florets. Book says plant can grow to 3 m. It would be quite a sight.

1992 Jan 26th Flowering on loop road from Howman's Gap to Falls Creek.

1995 Jan 15th Flowering on Dargo weekend.

Ozothamnus thyrsoideus
(Helichrysium thyrsoideum) (Cascade)

1967 ~~Nov~~ Dec. 12th Found flowering in A.P.M. Bush.
1968 Jan 18th " on road to Baw Baw.
Flowers on short braches off main branch + branches bending over or cascading.
1969 Nov 23rd Flowering on road to Mt Baw Baw
1970 Jan 1st " " Licola Rd.
" 24th " " Buchan Road.
1971 Jan 17th " along road to Mt Useful.
Nov 12th " at Whitelaw's Track
1972 Jan 30th " " Mt Howitt.
Feb. " " Mt St Gwinear.
1991 Jan 26th " on Tulloch Ard Rd near Gelantipy.
1994 Jan 16th " at Mt. St. Gwinear.
Nov 9th " at Licola weekend
1995 Jan 15th " " Dargo "
1979 Nov 29 See letter from Herbarium over page.
1996 Jan 20th Flowering on way to Mt Hotham
1997 Jan 18th " " Livingstone Ck Track near Omeo.
1999 " 23rd " " Gelantipy weekend. Identified from specimen brought back
2001 Aug 27th Flowering in Newborough bush.

DEPARTMENT OF CROWN LANDS AND SURVEY

PLEASE ADDRESS
ALL CORRESPONDENCE
TO THE DIRECTOR

TELEPHONES—
63 7030
63 8935

REF. MAT:DPJ
1994/79
File: 5.2.62

ROYAL BOTANIC GARDENS
AND
NATIONAL HERBARIUM
BIRDWOOD AVENUE
SOUTH YARRA, VICTORIA
AUSTRALIA, 3141

29 November 19 79

Mrs. O. Thompson
P. O. Box 644
TRARALGON. 3844

Dear Mrs. Thompson,

Thank you for the specimen of Helichrysum which arrived with your letter of 26 November, 1979. It has been identified by Miss Todd as Helichrysum aff. thyrsoideum (DC.) P.F. Morris & J.H. Willis as the leaves are much shorter than those of H. thyrsoideum. The pink on the involucral bracts had faded almost completely by the time that the specimen reached us.

The specimen will be placed in our Australian collection together with your notes about it.

Yours sincerely,

(DR.) D. M. CHURCHILL
Director and Government
Botanist

Dad brought home from work
Collected — Young's Road — Blackwarry

Ozothamnus turbinatus

(Helichrysum Paralium) (Coast)

1969. May 24th In seed. at Cape Paterson. Compact bush about 4 ft high. Leaves alternate all round stem, very harsh to touch, curved backwards giving grooved effect underneath - dark green on top + whitish underneath - top branches white - young leaves real blue.

1970 Mch 7th Flowering at Cape Liptrap lighthouse. Flowers in very dense heads at ends of branches; leaves crowded on branchlets, with edges rolled back. There is a slight yellowish stain on back of leaves.

This plant used to be H. gunnii, but now H. gunnii is only a Tasmanian variety without the yellow stain.

1980 Mch 29th Flowering at No 4 Beach Pt. Smythe.

Pandorea Pandorana (Wonga-vine)

1966 25 Sept Flowering at Stony Creek
26th Nov Found seed pod. Very large long and green. Not ripe at this stage.
1967 1 Oct. Flowering in Garden
22nd " " at Garmandale Rd.
1968 Sept 20th " in garden Beautyful display.
1969 Jan 1st Seed pods dried & scattering seeds. Pods quite hard, seeds packed very tightly. Seeds are covering with thin membrane about ½" across easily blown by wind. Pods about 2½" to 3" long & app. ¾" wide.
1968 Oct 13th Flowering along Stoney Ck Cawarr
1969 Aug 21st " in our garden, just a couple of flowers.
Aug 29th Flowering at Granite Rock.
Sept 4th Flowering in profusion at home.
Oct 4th " along Licola Road.
12th " at Beaconsfield Upper.
Nov 2nd " " Briagalong.
1970 Aug 21st " in our Garden.
Oct 18th " " Briagalong.
(We counted seeds in one pod from garden and found app. 100 in the pod. Half the pod falls off exposing the seeds.
Nov 23 Plant at Lily Pily Gully.
1971 Sept 3rd Commencing to flower in Garden.
Oct 10th A truly lovely sight in garden.
23rd Flowering at Morwell Nat. Park.
1972 July 22 Plants in Fairy Dell.
1993 Jan 30th " in Errinundra N.P.
1995 Apr 12th " " Drouin Water Reserve.

1995 Oct 25th Flowering on Mt Heddrick.
2004 Apr 3 Growing in Colley's Rd. Block.

Para caleana minor

Caleana minor.

1970 Jan. 3rd Flowering along Oaks Road at Cormandale.

Scape: 14 cm long with 3 flowers & a bud.
No stem bracts except at each flower.

Leaf: Withering at flowering time. Red-app 7 cm long and red and narrow.

Stem: Very deep red.

Dorsal Sepal: Similar to C. major only smaller & then slightly curved, Just a narrow straight thin petal.
App. 7 mm long & 2mm wide - green. with red tip & broadest at tip.

Lateral Petals: 5 mm long completely straight 1mm wide half way up the winged column.

Lateral Sepals: Same as dorsal sepal, 7mm x 2mm broadest at tip, curved upwards - at top of column.

Labellum: On long straplike stem quite thick stem about 5mm & 2mm wide. Labellum thickly covered with black shiny glands Shaped with large round area & then smaller ▽ area. Very sensitive & flips into column.

Column: Almost 1 cm long very winged & curved & wide.

Ovary: 7 mm long red ribbed & only quite long stalk app. 1 cm long.

1978 Jan. Synonymous with Paracaleana minor.
D.G. Blaxell P.L. Jones (Orchadian 5 No 9:
126, 127 (1977) [C. Beaugle hole & R. Parsons] Changed back Nchiggo Edin

1984 Dec 29th Flowering along Boodyarn Road.

1990 Dec 18th " " " " 200 meters west
of Grasstree Swamp Road

Parantennaria uniceps

1992 Jan 26" Flowering in damp area near track to Cope Hut on Bogong High Plains. Tiny plant about 1" high. Crowded with leaves, narrow shiny and very dense. leaves about ½" long, with tiny point. Single flower-head, stalkless with tiny florets sheathed in pale brown pappery bracts around the cluster.

Parapholis incurva. Coast Barb-grass

Ellen describes it as spiky leaves encasing stem. long spike heads. It would be recorded over on the coast. Cliff has it recorded for there too.

*Parapholis strigosa Sea Hard-grass.

1993 Mch 13 Growing along Henderson's Rd, Toongabbie
leaves grasslike, flat, stiff & inclined to curve upwards.
Bases of leaves yellowish & clasping around the next
leaf. Leaves app 4-6" long.
Culm stiff, erect, spikelets so close in hollows
that it just looks like a continuation of culm,
but fractionally wider. Spikes so stiff that many
of them were broken off - perhaps by the wind?
They appeared to break easily beneath spikelet.
Whole plant reddish in colour.

Parentucellia viscosa — Sticky Bartsia

1993 Jan 30 Plants in flower around camp at Combienbar.
1994 Nov 26 Flowering in APM block Stradbroke Sth. Gipp. Hway.
1995 Dec 12 " " Railway Reserve near Traralgon.

Parsonia brownii (Twining Silkpod)

1967 Dec 23rd Flowering Morwell National Park.
1968 Nov 23rd In pod in Bulga Park
1972 July 22nd " " " Fairy Dell with lots of seeds on the ground.
1973 June 23rd Plant growing at Parlamurla.
1993 Jan 30 Growing between Club Terrace & Combienbar.
2006 Nov 4 Flowering at Springsure area.

*

Paspalum dilatatum Paspalum

1996 Dec Growing in Railway Reservoir Conservation Reserve, Traralgon.

* Paspalum distichum Water Couch

1994 Oct 30 Growing in Dawson R'way Reserve.
1996 Dec " " Railway Reservoir Conservation Reserve, Traralgon.
2000 Apr 11th " " Heyfield Wetland.

Patersonia Fragilis (Short Purple Flag)

1967 Jan 14th. Flowering .8mls from Early Road along Anderson's Track. Almost too late only found one flower but found ~~last~~ lots of plants finished flowering. Also found many plants at Waterlily pond.

Nov 25th Flowering as above.

1968 Nov 3rd " as above.

1969 Jan 1st " " "

1970 Jan 18th " " Senenis Track. & Anderson's Track.

1969 Nov 8th " " Wilson's Prom.

1989 May 11th " in Boodyarn - only one flower so far.

1992 Nov 30th " in Grass Tree Swamp - Boodyarn Forest.

1995 Oct 25 " on Werrhaggi Heathlands

Dec 12th " " Stradbroke APM block

~~secunda~~ occidentalis

Patersonia (longiscapa?) Purple Flag.

1967 Nov 25th Flowering on opp side to pool on Anderson's Track. Flower stalk longer than leaves, flowers smaller.

1978 Jan. Synonymous: P. sericea. D Geerinck Bull. Jard. Bot. Nat. Belg. 44: 25-60 (1974) [C Beauglehole : R. Parsons]

1994 Nov 26th Flowering in APM block Stradbroke Sth Gipp. H'way

1995 Oct 28th " on Wonthaggi Heathlands.

2001 Nov 3 " " Newborough bush.

PELARGONIUM AUSTRALE

Regards Phil Rolston Parsons.

THE BOTANICAL REVIEW

VOL. 44 JULY–SEPTEMBER, 1978 No. 3

WATER IMPERMEABLE SEED DORMANCY [1]

M. PHILIP ROLSTON [2]

Crop Science Department
Oregon State University
Corvallis, Oregon 97331, U.S.A.

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INTRODUCTION

Viable seeds sometimes will not imbibe water and therefore fail to germinate, even when conditions are apparently favorable for germination. Seeds that are unable to imbibe water are commonly termed impermeable or hard seed; they remain hard compared to imbibed seeds, which soften during germination. Impermeable seeds are common in many species of Fabaceae (legumes) as well as occurring in some species of Cannaceae, Chenopodiaceae, Convallariaceae, Convolvulaceae, Geraniaceae, Malvaceae, Solanaceae (Harrington, 1916), Anacardiaceae (Stone and Juhren, 1951), and Rhamna-

[1] Oregon Agricultural Experiment Station Technical Paper No. 4754.
[2] Permanent address: Grasslands Division, Department of Scientific and Industrial Research, Private Bag, Palmerston North, New Zealand.

THE BOTANICAL REVIEW 44: 365–396. July–September, 1978
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Sapindaceae

The last two years we have done a census of an area of SECV land for them. The area was burnt in autumn between the two census which were carried out in November each year. So we will have some idea of the regrowth after a slow burn. One thing that surprised us was the number of plants of Pelargonium australe that appeared after the fire although we did not record it beforehand. As there were about 14 people present for the first census I doubt if we would have missed it had the species been present. We must check it out this year to see if it is at all suppressed by the more dominant species. We could let you have the results of this work if it would be of interest to you.

P.T.O.

Neville has noticed this with Pel. australe too. Many Geraniaceae are hard-seeded like wattles. (see above) so can store their seeds in the soil between fires.

Pelargonium Australe. (Austral Storks-bill)

1967	Jan 4th	Flowering	in	Calligree Hills
1911	Nov 12"	"	at	McLynn.
1994	Nov 9"	"	on	Incola weekend.
2002	Nov 14"	"	in	Railway Reservoir Reserve, Tigan.
2006	Sept 30	Growing	at	Senenis Track.
2006	Feb 19	Flowering	on	Wilsons Prom

Pelargonium inodorum

2006 Nov 15th Flowering at Senenis Track. This species has petals no longer than sepals & is a dark reddish colour. Flora of Vic. states it often flowers after fire. (Photo in Ralph's CD)

Pelargonium rodneyanum Rosy Storkbill

1972 Aug 27th Plant growing at Mt Arapiles

Pellaea falcata — Sickle Fern

1967	Apr. 30th	Morwell National Park.
	Sept 10th	" " "
1970	Oct 17th	Briagalong.
1972	Mch.	Growing down tracks on Walhalla road. near Rintouls creek road. Plants 2-3 ft high
	July 9th	Growing in profusion dep gully at Billy Goat Bend.
	22nd	Fairy Dell
1993	Jan 30	Errinundra.
1994	Nov. 8th	Max James found specimen in Macalister Gorge Scenic Reserve. on steep rocky face over river from where road from Burgonies Gap reaches river. The specimen was short with app. 9 pinnules with very short stalks. I thought it was the NSW species P. paradoxa because of broad shape of pinnules as it already had immature sori along margins. The books say stalks can be 1-5 mm in P. paradoxa but <1mm in P. falcata. Neville Scarlet said specimen was sub-sessile & not short-stalked so it was P. falcata. I had not realised, nor did the books state, that P. falcata juvenile pinnules were so much broader in comparison to length than the mature form.

Pentachondra pumila — Carpet Heath.

1971 Jan 30 Flowering and with berries on plains at Howitt Springs. Mat plant about ½" high, main woody branchlets much branched. Leaves opp, close together, pointing upwards so that each little side branchlet has the appearance of a rosette of leaves. Leaves yellow-green, lanceolate, longitudinal veins, 5mm long. Leaves on upper ends of branchlets have a fringe of white hairs around the apex half of the leaf and a few scattered hairs towards the centre of the leaf.
Flowers tubular, sessile, white, 5 petals densely hairy to opening of tube then ring of stamens and then tube only sparsely hairy from then to bottom. Tube has opaque appearance below opening and is 6 mm long. Flower about 4mm across
Berries: Bright deep red, broadest at end with stigma and tapering into a point at stem end, about 8 mm long and 6mm broad. Berries hollow with 2 rows of "seeds" app. 4 seeds each row. Inside of berry - seeds coated with almost crystal-like grains.
A truly decorative and interesting plant.

1973 Dec Flowering at Mt Baw Baw

See 2nd page.

Pentacondra pumila Carpet Health.

1992 Jan 26th Flowering + with berries - plants near exclusion area on Bogong High Plains. First area coming up from Angler's Rest.

1995 Jan 15th Flowering on snow plain near King's Lookout on Dargo weekend.

1996 Jan 20th Flowering on Hotham weekend as above record.

Pentapogon quadrifidus Spear-grass

1994 Oct 30 Recorded for Dawson R'way Reserve.
1995 Dec 12 " " Railway Reserve near Traralgon.
1996 Dec " " Railway Reservoir Conservation Reserve, Traralgon.

*. Pentaschistis airoides Little Hair-grass

1994 Nov 1. Growing in Casuarina Reserve Fulham

Persicaria decipiens — Slender Knot-weed.

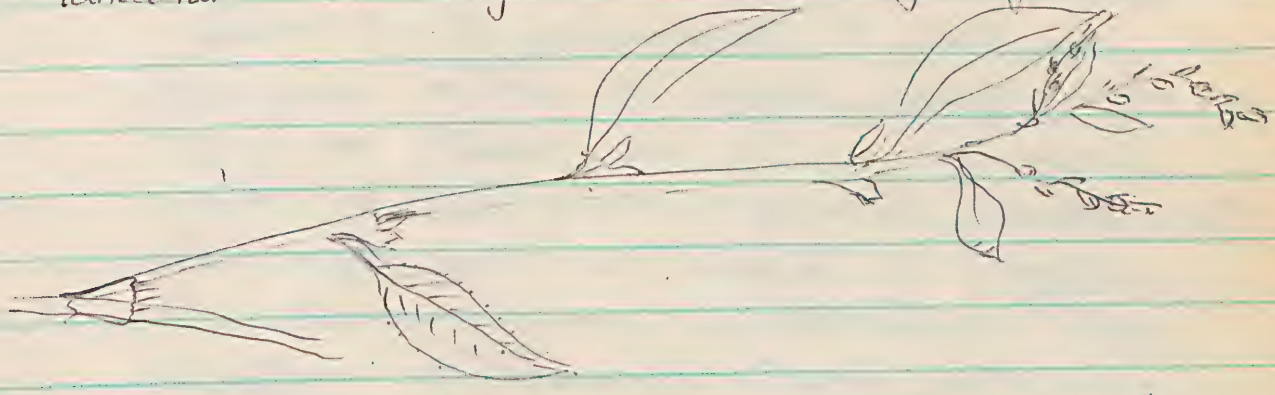
1994 Oct 28 Growing in Dawson Water Reserve
1000 Apr 11" Flowering in Heyfield WetLands
2003 " " " " Traralgon Railway Reservoir Reserve

Persicaria hydropiper

Polygonum hydropiper Water Pepper

1991 Apr. 21st Flowering down near lagoon. Two species there -
P. hydropiper. & P. lapathifolium

Stems + peduncles glabrous; spikes interupted but not with regular spaces and with nodding spike as terminal. Buds deep pink but flowers (see below) whitish. Stipules ciliate; perianth not glandular, in our specimen. leaves ovate lanceolate with very hot taste. Margin of leaves ciliate



Calyx had tubercles on it but as it was in bud couldn't see if flower had any.

1994 Oct 30 Growing in Dawson Water Reserve
1995 Apr 12" " " Drouin " "
1996 Dec " " Railway Reservoir Conservation Reserve, Traralgon.
2000 Apr 11" Flowering in Heyfield Wetlands.

Persicaria lapathifolia

Polygonum lapathifolium Pale Knd. weed

1985 June 21st Ken Harris collected specimen on Walsh's Block of Morwell N.P. Ken thinks it is P. minus & he may very well be right but I gave it this identification as the plant did not appear to be procumbent, it had no marginal bristles on stipule, except at the very top; the flowers were in a continuous spike of dull pink or greenish flowers not the bright pink or reddish of P. minus.

1990 Apr. 2. Plant flowering along river flat beneath Ridge Homestead at Rosedale. Stipules with entire margins; flowers pale pink or greenish and continuous 7cm long with several spikes to a branched panicle usually 3 – 5. Plants were growing on first flat from river and 3 ft high. Flowers drooping not erect.

1990 Apr 4th Dad found same kind of plants on our flats.

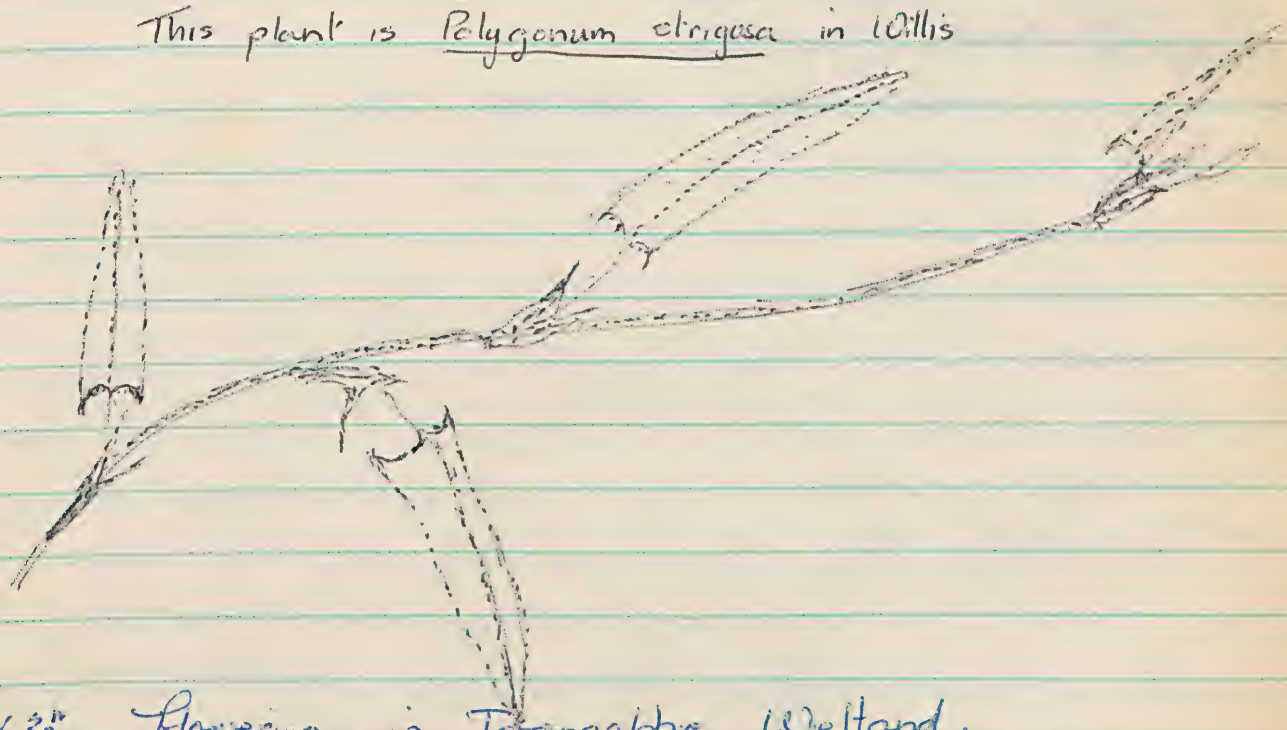
1991 Apr. 22nd Flowering down near the lagoon at home.

* Persicaria maculosa Persicaria

1995 Apr 12 Growing in Drouin Water Reserve.

Persicaria praetermissa — Spotted Knotweed.

1999 Oct 4th Susan Taylor gave me the specimen from Sale Common somewhere near where new bridge is to go. Specimen did not have buds or fruits.
It is a climber or perhaps scrambler is better word. Stems brown, hairy with reflexed or retrorse hairs, long & stiff hairs. Flora of Victoria mentions ochreas which are sheaths formed by 2 stipules. Ochreas are also hairy with same kind of hairs but perhaps more flattened onto ochrea. Leaves narrow ovate, hastate at base, margins & veins with hairs - a few on the lamina. Leaves petiolate.
This plant is Polygonum strigosa in Willis



2002 Nov 30th Flowering in Toongabbie Wetland.

Persoonia chamaepeuce.

1970 Jan 1st This plant with seeds at Tamboritha Saddle.

Jan 25th Flowering at the Cobberas and also on the road to Benambra.

" 26th Flowering along road to Benambra in Wulgulmerang area.

1972 Jan 30th Flowering at Mr Hewitt.

1989 Jan 14th " " Wulgulmerang.

1999 " 23rd " " Cicantipy weekend. Identified from specimen brought back.

Persoonia Confert. flora (Cluster-flower Geebung)

1967 June 20th Found shrub on King H'way. Leaves 5 cm long 1.5 cm ~~long~~ wide dark green + smooth above, lighter beneath. Edges recurved Flowers from leaf axils. Fruit pointed like lemon 1.2 cm long, paler nearer stalk + darker towards point.

1968 March 24th In Boola Boola area. Leaves in this specimen yellowish + fruit at point indigo-colored.

1969 Aug 24th Fruit on plants at Glengarry North.

1970 Jan 2nd Plants in bud at Tambaritha Saddle.

Sept 13th Plants growing in APM. reserve.

Oct 11th ~~Flowering~~ Plants at Heyfield. (NJ)

1972 July 22nd Plants growing at Fairy Dell.

1986 Jan 10th Flowering on Anderson's Track near Early Road.

1991 Jan 26th Plant growing in Forest along Tullock Ard Road near Gelantipy.

1993 Jan 29th Flowering along road north from camping area at Combienbar on Errinundra weekend

1995 Jan 15th Flowering near Grant cemetery on Dargo weekend.

1994 Nov 9th Flowering on Nicola weekend.

1995 Oct 25th " " Mt Heddrick

Persoonia Juniperina (Prickly Geebung)

1967 Jan 4th Flowering in profusion along road at Cormandale. Was flowering earlier in our paddock
Nov 12th Not flowering Cormandale reserve
1968 Sept 18th In seed at " "
1969 Jan 1 Flowering along Anderson's Track
Feb 16th " " Rosedale
May 10th " "
May 24th Plants growing at Cape Paterson but not in flower. Leaves more robust than plants at home - more yellow to leaves leaves broader + longer + although having point at end they were quite soft. Could this be because of young growth, although plants at home more prickly. Edges of leaves turned upwards giving them grooved effect. Branches red but covered with whitish soft hairs or down giving branches whitish appearance.
Sept 4th In seed at the Prom but berries deep red.
Nov 8th Berries on plants at Wilson's Prom.
1970 Mch 14th Flowering on heathlands near Walkerville.
Mch 28th " at Cormandale + along Chassum Rd. also locally.
Apr 21st Flowering on road to Venus Bay.
May 25th " at Cormandale reserve.
Aug 23rd " at Rosedale.
Oct 17th " at Briagalong with flowers and seeds.
1971 Sept 2nd Flowering in McKenzie Falls area in the Grampians.
1978 Sept 23rd Berries green now on plants on heathlands near Bear Gully (Cape Liptrap area.)

1990 July 22nd Flowering along Seldom Seen Road - Holey Plains.
1991 Oct 12th Plants growing along road at Mt Hedbrick
1993 Feb 26th Flowering along track to Shallow Inlet in Wilson's Prom N.P.
1995 Feb 6th Flowering along Anderson's Track.
" Oct 12 Plants on Wonthaggi Heathlands.
1996 Nov 23rd " - Old Port Trail in Nooramunga Coastal Reserve.
2000 Dec 3rd Flowering in Sweetwater Ck. Reserve.

Persoonia levis Smooth Geebung

1993 Jan 30. Growing in Errinundra N.P.

Persoonia linearis Narrow-leaf

1967 June 17th Plant had seed pods at Granite Rock (?) on King's H'way. Leaves 1½" long, very narrow ⅛", light green. Flowers from leaf axil. Young leaves pretty light green & woolly appearance. Flowers erect. Fruit 7 mm. broadest nearest flower slightly tapered at stem end. Stem to seed pod .5 cm.

1993 Jan 29. Flowering on roadside on road north of Camping area at Combienbar.

Persoonia rigida Jeff Geebung

1972 Aug 29th Plant growing in Golton Gorge trip. Leaves broadest at the tip recurved along margins, woolly. Fruit at leaf bases. and in terminal cluster. Branch reddish covered with soft hairs.

1973 Sept 6th ~~Floo~~ Plant in fruit near Lake Eppalock - Bendigo

Persoonia silvatica Forest Geebung

1993 Jan 30 Growing in Errinundra area along Hensleigh Ck Road. Very like P. confertiflora but with glabrous leaves & branchlets A small hard-barked tree.

* Petrorhagia nanteuilii (prolifera) Proliferous Pink

1994 Oct 30 Recorded for Dawson R'way Reserve

* Phalaris aquatica Phalaris or Toowoomba Canary Grass.

Common grass around our area. Crows along Downies lane.

1994 Nov 1. Growing in Casuarina Reserve Fulham.

2000 Apr 11" " " Heyfield WetLand.

*

Phalaris arundinacea. Reed Canary-grass

1994 Oct 30. Plant growing in Dawson Rlway Reserve; but not really sure identification is correct as it is not recorded in the Hinterland in Cliff's book

festivum

Phebalium (obcordatum) Dainty Phebalium

1973 Sept 6th Flowering in the Whipstick. Only found a very few plants in one area.

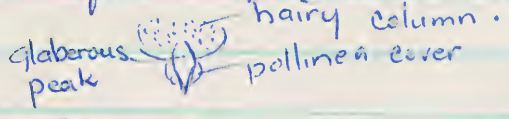
2003 June Name change in 4th ed of Census.

Thebalium stenophyllum

1972 Aug 28th Flowering in the Little Desert.
Flowers lovely bright yellow.
leaves rolled back until they meet so that the undersurface is hidden.
leaves up to ½" long pointing upwards giving curved appearance., blunt at apex. Hairs on leaves stellate.
Flowers terminal.

Pheladenia deformis
(Caladenia deformis) (Blue-beard Caladenia)

1969 Aug 16th Flowering at Wilson's Prom.
Leaf 1" grooved
Petals: 5 same ½" x ¼". The dorsal sepal inclined to be erect. Color blue.
Ovary: Grooved, particularly thin.
Labellum: 3 lobed - 2 lobes with teeth.
Central lobe covered with rows of cali first half but last half Δ dark purple. Last half densely covered with cali.
Column: widely winged.
Flower is a beautiful deep blue when first out.
Sept 4th Still flowering at the Prom.
1971 Sept 1st Flowering on road from Horsham to Stawell. Flowers large 3cm across at least. and very deep blue. Labellum appears quite definitely three-lobed. Lateral lobes with 5 teeth. Mid-lobe with fringe at point, cali in definite rows app. 6. full length. and back half of labellum light pink or almost cream. no congestion of cali - all very regular. Cali elongated not circular
Column: Dark purple from back, covered with white hairs and decidely peaked at the front. Peak so narrow that the pollinea cover are visible from above



2000 July 11th In Pictorial Guide to Wild Orchids of Victoria, Jeanes & Backhouse put this species + Caladenia caerula into the genus Cyanicalia but Census Jan 2000 still leaves them in Caladenia.

[illegible] June [illegible]

Philotheca difformis.
Eriostemon difformis

1971 Sept. Flowering at Flat Rock near Mt. Zero.
Plants not very high about 1' to 2'.
Flowers small pink and quite rose coloured in bud. Flowers app 12 mm. wide
Leaves app 3 mm long with lumps approx. 3 or 4 on both sides of leaves.
Stems with blisters covering it. These blisters are very pale yellow-green, but are not close together. Flowers terminal on short stalk sometimes two flowers together.

1972 Aug 28th Plant growing in Little Desert but not in flower. Leaves as described above but no 'blisters' on stem. Plants very dry. Leaves pointing upwards & so covering the branches. Some leaves very tiny.

Aug 30th Flowering in Flat Rock area with 'blisters' on the stems.

1973 Sept 3 Flowering in the Whipstick - Bendigo.
Very tiny form, leaves very fine about 3 mm long & no more than 1 mm wide.

1978 Jan Recognized as extra species is E. angustifolius
P. C. Wilson. Willis E. 333 (1972)
[C. Beauglehole & R. Parsons]

190 2003 June Name change in Flat of Genesis

Philotheca myoporoides

(Eriostemon myoporoides) (Longleaf Waxflower)

1960 Aug 27th Flowering at Cowwarr. Kept long time app. month in water so presume it flowers for app. this length of time.

1968 Oct 13th Flowering at Cowwarr along Stoney Ck.

1970 Oct 17th " " Briagalong. leaves smooth app. 5-6 cm long and 1 cm wide leaves bending inwards from main vein to give slightly boat like effect V instead of lying flat. Flowers from leaf bases. leaves alternate. Flowers stalked then branched three side ones + one centre usually one. Buds pink flowers white. One plant had extra ring of half size petals thus being semi-double. Five petals. Branches "pimpled" slightly. leaves lanceolate pointed at both ends, stalkless

1989 Apr. 21 Plant growing on edge of car park at Hola Tree area. leaves more than 4" long.

1995 Oct 29th Flowering on Insolvent Track just past Mt Ray Track. on right-hand side. List for area says this plant growing in this area is a different form from usual.

1995 Muelleria Vol. 11. P. 113. According to this article Eriostemon genus is restricted to E. australasius (NSW) & E. banksii and the remaining taxa transferred to the genus PHILOTHECA. Under P. myoporoides there is a complex of 9 subspecies

and another variant from Mt Stewart collected by K. Rogers + also by J. Turner.
Article includes key to 9 subspecies of which 3 are new ones.
Only 2 of the subspecies occur in Vic subsp myoporoides and.
subsp eurcensis from Eurca and of course there is the
variant from Mt Stewart. All subspecies are also described
from point of view of variations.

2001 In Muelleria Vol. 15 2001 two subsp of P. myoporoides
are described. One from Mt Stewart, East Gippsland one
from Suggan Buggan a N.S.W.

1998 In Muelleria Vol. 11 1998 Article on P. myoporoides giving
9 subspecies P 113

Philotheca pungens
Eriostemon pungens — Pricky Waxflower

1972 Sept 1 Plant in bud on rocks at Colton Gorge.
low bush. leaves about ½" long, linear,
ending in pungent straw-coloured point
leave alternate. Flowers singly at leaf bases.
Branches hairy in new growth.
Flowers white.

2003 June House change in 1st ed. of Census

Philotheca trachyphylla.

(Eriostemon) Tracyphyllis Rock Wax-flower

1970 Oct 17th Flowering Dargo Road Briagolong. Leaves 4 cm long 1 cm wide, main vein prodtruding past leaf to make point (not prickly). Leaf darker on top and fairly dark green. Main vein fairly prominent, leaf flat. Leaves alternate. Flowers in app. 3s at leaf bases ~~to~~ stalks not branched but all coming from leaf base. Flower petals white, five, petal turning back from centre of flower and stamens much more spreading than usual in Eriostemon. Ovary quite visible & not hidden by stamens. Branches slightly pimply..

1972 July 9 Plant growing at Billy Goat Bend.

1989 Sept 16th Tall shrub or small tree with dull leaves 5 cm long dotted with oil glands, but no flowers at this time.

2003 June Name change in 7th ed. of Census

Philotheca ~~verrucosa~~ verrucosa.
(Eriostemon verrucosus) (Hairy Waxflower)

1967 Sept 1st Flowering in Heyfield Reserve. Still lots of buds on plants. Many plants not commenced to flower yet.

1969 Oct 4th Flowering at Heyfield.

1970 Oct 12th " " Heyfield on Rifle Range. Quite a number of flowers finished. Flowers stalked singly from leaf bases. leaves small ½cm long orbicular in shape ½ cm wide sometimes longer than wide. All curved inwards, pointing up stem so as to cover stem. Stem very pimply with brownish pimples. Flower stalks short ½ cm Mr Cane says there is double variety of this plant in Heyfield reserve. Plants up to 3ft high.

1971 Sept 2nd. Flowering at Mt Arapiles near Horsham. Plants very large up to 8ft high and greener looking than Heyfield but still with pimply appearance.

1972 Aug 27th Flowering at Mt Arapiles

2003 June Name change in 7th ed. of Census

Phragmites australis Common Reed.

1994 Oct 30 Growing in Dawson Water Reserve
1995 Apr 12" " " Drouin " "
2002 Nov 30" " " Toongabbie Wetlands.

Phyllangium
(Mitrasacme) distylis

1955 Oct. 31st Very tiny plant like description of M. distylis in Black's Flora of S.A. Most of the plants in our specimen were single one stem plants while M. distylis is branched. However we did find one plant with a second flower in bud, so perhaps there will be more branched plants later. Photographed

2002 June Name change in 7th ed. 1 Census

Phyllangium sulcatum

(Mitrasacme paradoxa.) Wiry Mitrewort

1995 Oct 29th Flowering on Wonthaggi heathlands. Our specimen was small plant about 1" high but conditions were very dry. Calyx 2-lobed on pedicles much longer than leaves when mature. Flowers on shorter pedicles but still longer than leaves.
Very good illustration in Garnet's Wilsons Prom Book.

2003 June Name change in Flora of Victoria

1983 Nov 3 Recorded at Yanakie Flora Reserve by Ellen Lyndon. Plant about 2" high.

Phyllanthus Gunnii (Shrubby Spurge)

1967 June 17th. In bud at Granite Rock. Shrubby bush low (1½ ft) stems woody + brown. leaves up to 5 cm long, about .5 cm wide, only one vein, edges of leaves recurved, Park green above, rough to touch, probably many glands, yellow green beneath. Buds in clusters at leaf bases. leaves alternate, broadest near top.

1969 Aug 29th Flowering at Granite Rock.

Above specimens are Phyllanthus thymoides.

1969 Sept 4th This plant is rather similar to a Indigo bush. The leaves are oval and opposite + give it a look of being pinnate. The leaves are blue green. The flowers hang down under the leaves on long stems from leaf base. Flowers greenish yellow unisexual. I thought the female flowers were at the base of the stalks but think now these may have just been bracts. Plant about 7 ft high Flowering at Wilson's Prom.

Phyllanthus hirtellis

1969 Sept 13th Flowering near Holey Hill, Rosedale. Have not had specimen identified but think it is hirtellis because leaves were hairy. Female flowers larger than male. Female flowers 2 together at leaf bases.

Oct 14th Flowering at Cavewarr. Saw mainly male flowers.

1970 Aug 23rd Flowering at Rosedale & Holey Hill Trig Tr.

Sept 26 " in pine area at Longford.

Oct 11th " at Heyfield.

19th " at Briagalong.

1971 Aug Flowering in the Grampians. Leaves oval with deep midrib. Flowers in pairs leaves very hairy, stems branches & calyxs all with brown hairs. No cure of identification

1972 Aug 29th Flowering in Grampians

Sept 10th " at Rosedale.

1978 May 7th " in Holey Plains S.P.

1994 Nov 9th " on Licola weekend.

1995 Oct 25th " on Mt Heddrick also on 12/10/91.

hirtellus

Phyllanthus (thymoides)

1969 Aug 29th Flowering at Providence Ponds. leaves lighter green than ~~Ph. gunnii~~ Granite Rock specimen and flowers mostly single + Copy of Clematis gives this plant in the area.

1969 June 17th At Granite Rock writing under Phyllanthus Gunnii.
Phyllanthus plants have male + female flowers on different plants.

1970 Jan 2nd Flowering at Burgoin's Cap.

Phyllloglossum drummondii Tiny Clubmoss.

1979 Oct. With fruiting body. Growing in sandy situation at Giffard.

Phyllota pleurandrioides

1972 Aug 28th Plant growing in Gollan George area. Small shrub with hairy branches, leaves linear, narrow, hairy few along branches but clustered at end of branches as floral leaves for flower. leaves look like rosette around flowers. Pod oval, longer than calyx. Must be quite pretty in flower.

Phytolacca octandra. Red-ink Plant (Weed)

1988 Mar. 7th Plant flowering & in berry in Urella Reserve, Trafalgar. We had trouble keying out this plant as I thought it had red flowers but the red was the calyx that is left after the berries fall. the actual flower is white. Plant is very spreading and can be up to 2 m. high but ones we saw were about 4½ ft. Flowers in dense spikes with flowers almost sessile. leaves ovate-lanceolate, shortly petiolate. Fruit black berries depressed in centre & marked into 8 segments with seed in each. Introduced species. Berries are supposed to have red juice - hence name — and perhaps our berries were not ripe although they were black; but the juice was almost clear & certainly did not stain.

1995 Apr 12th Growing in Drouin Water Reserve.

* Plenom on acarna

(Circium acarna). Milk Thistle

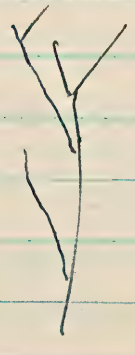
1994 Nov 1. Growing in Casuarina Reserve Fulham.

Also grows on Downies lane T'gon Sth

~~Oct~~ ~~Recorded for Dawson R'way Reserve~~

Picris angustifolia subsp merxmuelleri Hawkweed Picris

1995 Jan 15th Flowering at King's Spur between Lanky Plain & Grant. I am not sure of this identification but it keys out ~~as~~ in Willis to P. hieracioides but this has been divided in two species, one coastal & one eastern highlands. In Update 4.2 Tim Entwistle states it has been named by S. Holzapel & will be included in a forthcoming paper. Our specimen has oblanceolate hispid leaves Bristles do not appear to have white tuberculate bases, but they do have a thickening on the apex but cannot see if it is a gland or a bifid apex, but I think it is the latter leaves are alternate & pappus is very fine with extra fine barbs. Achene is banana shaped with ridges & cross sections & only extending into ~~neg~~ short beak. Petals are divided into 3 at apex, yellow & like a Dandelion. Pappus is about same length as involucre bracts which are in more than one row. but ~~tall~~ lower row does seem to be curling back a bit but with apparently only one bract below involucre. Head consists of ~~8~~ flower branched -



Whole plant with bristles & stands about 2ft high. lowest leaf. 10cm long tapering gradually in 4.5cm petiole.

In update 3.6. it states the highlands species has rounded transverse sections on achenes & ours looks like that. Also beak is supposed to be longer than coastal species. Coastal species has scale like transverse sections on achene.

1994 Nov 9th Flowering during Licola weekend where we went up past Bennison Spur lookout.

1996 Jan 20th Flowering on Hotham weekend.

1.10

PICRIS

Picris echioides is now *Helminthotheca echioides.*

Picris hieracioides is now either *P. angustifolia subsp. angustifolia or P. angustifolia subsp. mer*xmuelleri.with the latter being most likely for this area.

The species mentioned in Willis as *P. hieracioides* var *squarrosa* is now *P. squarrosa.*

There is also a new species recorded for the north west of Victoria.

Picris is separated from Helminothotheca by :-
outer bracts of involucre ovate cordate in H. not leaflike linear.
as in Picris + not leaflike in Picris.
In Helminthotheca hairs on stems + leaves coarse bul- not bifid; Cypsela abruptly narrowed into a filiform beak not more or less gradually tapering at apex a beak not filiform.

Pimelea alpina (Pink Riceflower)

1968 Jan 18th Flowering at Baw Baw. Tiny pink & white flowers, ½" across, at end of stalk. Petals fall very readily. Typical riceflower leaf formation & arrangement.

1969 Nov 23rd Flowering at Mt. Baw Baw.

1970 Jan 21st Flowering on the Cobberas. Dwarf form, pink, only 3" high.

'971 Jan 17th Plants of dwarf form only about 3" high. No flowers but some seeds. Mt Useful.

Jan 30th Plants growing at Howitt Springs.

1973 Jan 26th Flowering at Mt Baw Baw

1994 Jan 16th " " Mt. St. Gwinear

1995 Jan 15th " " on Bargo weekend.

1996 " 20th " " Hotham "

Pimelea Axiflora (Bootlace Bush)

1966 Flowering on 24 Sept at Darlamurla

1967 Nov 5th. In seed at Stoney Creek. Seeds 4 mm long, oblong to fine point, clustered round stem at leaf base as flowers -- about 22 round stem

1968 Feb 11th. These bootlace bushes were almost small trees with trunk about 1" through In reserve near Tarra Valley turnoff. The trees were 9 to 10 ft high & trunks at least 2 inches through.

Oct 13th Flowering at Stoney Creek.

1969 Oct 4th " along Licola Road.

12th " in Warragul area.

1970 Aug 29th " at Darlamurla.

Oct 17th " " Briagalong

1971 Jan 17th Plants growing at Mt Useful.

Jan 30th Plants with buds in leaf axils, growing at Howitt Springs. Plants were shorter with more dense branches, leaves $\frac{1}{2}$" to $\frac{3}{4}$" long and rounded at tip. and fairly broad.

Aug 29th Plants in bud in the Grampians.

Sept 25th Flowering at Toronga Falls.

1993 Jan 31st " in Errinundra N.P.

1994 June 30th The botany group keyed out this plant which was in flower. Using Willis's key in the front of the book we realised the flower only had one whorl of floral parts. Studying Carrol & Lee "Name that flower" it says the whorl is really the calyx & this plant has no petals. Plant flowering at Trafalgar.

Nov 9th Recorded on Croajingolong weekend.

1995 Jan 15th Recorded on Dargo weekend.
1996 " 20th " " Hotham "
1991 " 27th " " Gelantipy weekend.
TF

Pimelea biflora

1970 Jan 25th Flowering on the Cobberas. Very short plant.

1971 Jan 30th Plants in bud at Howitt Springs. Also mat-like plant but standing about 3" high. Leaves ¼"

1972 Jan 26" Plant finished flowering on Bogong High Plains area probably Buckety Plain (not sure). Flower red. Ovary superior. Fruit rather ridged but not deeply. Style persistant on fruit. Leaves very crowded to cover branches.

Pimelea curviflora

'69 Oct 25th Flowering along coast at Seaspray. Small shrub with white adpressed hairs on branches. Flowers yellow small, the tube slightly curved. The plants we found all appeared to unisexual flowers. These appeared ~~mal~~ female flowers. According to Black the plants can have male & female flowers or bisexual flowers. Plant looked very succulent. Shrubs about 3 ft high.

Nov 5th Flowering along coast at Wilson's Prom.

1994 Nov 1. " in Casuarina Reserve Fulham

Oct 30 " " Dawson R'way Reserve

1996 Jan 30 " " Hotham weekend -

1995 Dec 12 " " Railway Reserve near Traralgon

Pimelea Flava

1969 Oct 12th Flowering down near Emerald. Beautiful slender plant with bright yellow terminal flowers. Petals bright yellow + stamens bright orange. Flower about ½" across entire group. Subtended by 4 very large yellow green bracts much bigger than flower and larger than average leaves. Just below flower bracts are a few leaves not much smaller than bracts + then back to ordinary size leaves. Leaves ½" long ¼" wide broadest at tip, rounded, yellow green, midrein very pronounced at back of leaf. leaves opposite + pointing upwards so as to cover stem. Another smaller bush nearby had leaves sticking out almost at right angles to stem + whole leaves flower + bracts in proportion but much smaller. New growth comes from between bracts + flowers, two new shoots opposite. About seven little flowers to make big group.

Pimelea Glauca — Smooth Riceflower

P.

Aug 28th 1966 Callignee Sth. Rd.
1972 Jan 30 Flowering at Mr Howitt.
1999 Jan 23rd Recorded for Gelantipy weekend.

Pimelea Hewardiana (Forked Rice-flower)

1970 Sept 26th Flowering in cleared area among the pines at Longford. Identified by Miss Galbraith.

This plant has smaller flowers than P. humilis with four bracts similar to leaves - if perhaps slightly broader. leaves very wrinkled with ring hairs - mainly visible on margins of leaves - both sides of leaves similar. Bracts of similar wrinkled appearance. leaves opposite app ¼" long and app. 3 mm wide, pointing upwards and close to the stem. Backs of leaves lighter than top ~~surface~~ surface. leaves pointed at apex and margins for second half maroon colour. leaves sessile. Stems or branches covered with long white hairs lying flat along stems, very hoary appearance. Flowers very pale yellow. on our specimen at end of branches though write up says they grow in forks of branches. Only mention I can find of this plant is in JCAP Books Vol. 3 Page 183 Sept 1965.

Pimelea

1971 Sept 4 Flowering at Mt Arapiles. leaves in pairs about up to ½" long on short stems, dark above, pale beneath. leaves opp in two directions. Flowers terminal on short branches. Bracts 4 as big as or bigger than the leaves. Flowers smaller than bracts with tubular flowers with 4 petals. About 8 flowers to a head but appear to open two or three at a time. Petals yellow, stamens orange. Branches ~~rough but not hairy~~ covered with hairs ~~on~~ lying along the branch and almost covering it. leaves hairy + flower itself also hairy.

Miss Galbraith identified the specimen I gave her as P. serpyllifolia and as I am sure Miss Galbraith would not have missed the adpressed hairs and P. serpyllifolia is glaberous I can only assume that we have found both P. serpyllifolia and P. heywardiana. We did find the specimens in two different areas. I think one was in the forest around the falls area while the other was at Mt Arapiles but I cannot be sure.

Pimelea Humilis (Dwarf)

1966 Sept 17th Flowering along Racecourse Rd. Rosedale.
Leaf like bracts and opposite leaves.
1967 Jan 1st Still flowering on Clark's Rd.
Sept 16th Flowering along Lime Pit Rd. Rosedale.
Oct 22nd " at ~~Labertouche~~ A.P.M. Reserve
1968 Sept 22nd " in APM Bush cleared & planted 1967.
Oct 29th " Flynn Railway Line
1969 Aug 29th " at Granite Rock
Sept 17th " at Rosedale
Oct 12th " Tynong North.
1970 Oct 11th " at Heyfield.
Nov 25 " at Briagalong.
1971 Aug 15th " in Garden at home.
Oct 10th " in A.P.M reserve. This plant can be identified by the very hairy or wobbly appearance of the back of the individual small flowers. Also at Holey Hills.
Oct 24th Flowering at Reid's Road Corner.
Nov 12th " " Flynn.
1994 Nov 26th " " APM block Stradblock Sth. Gipp. H'way.
Nov 1 " " Casuarina Reserve Fulham
Oct 28th " " T'gon Sth "
Oct 30 " " Dawson R'way "
Nov 9th " " Licola weekend.
1995 Oct 25th " " Mt Heddrick
12th " " Worthaggi Heathlands
Dec 12th " " Railway Reserve near Traralgon.
1999 Jan 23rd " " Gelantipy weekend. Identified from specimen brought back
2000 Dec 3rd " " Sweetwater Ck. Reserve.
2004 Apr 3 Growing in Colley's Rd. Block.

Pimelea ligustrina.

1970 Jan 25th Flowering on the Cobberas. Plants app. 3ft with flowers inclined to droop. Flower heads up to 3 cm across and orange stamens very conspicuous. 7-8 floral bracts at back of flower head fringed with hairs for entire margin. There is apparently 4 outside bracts & 3 more inside. These 4 outside bracts turn a decided red color & the tips of the other 3 red. leaves opposite, sessile but not stem clasping. leaves dark green, oval & slightly dish-shaped. Size of leaves deminish as towards the base of stem. Quite a woody plant. Truly quite a beautiful sight Bracts bigger than the largest leaves.

1970 Nov 23rd Flowering in Lilly-Pilly Gully. Hope identification is correct.

1971 Jan 30 Flowering at Howitt Springs and on Mt Howitt Hike. Very robust plants with many flowers (very large). The bracts did not appear so red as at the Cobberas.

1992 Jan 26th Flowering beautifully along loop road from Fall's Creek to Howman's Gap.

1993 Jan 31st Flowering in Errinundra N.P.

1995 Jan 15th " on Parga weekend.

1996 " 20th " " Hotham " at Village.

Pimelea (Spathulata) Linifolia (Slender)

1966 Sept 14th. Flowering in Rosedale reserve. Red stems flowers at end of branch and leaves sparse, a opposite Also flowering along Callignee 5th road.

1967 Oct 1 Flowering in our sand-pits

1968 Aug 18th " at Giormandale. These flowers have 4 broadly ovate bracts - sometimes reddish. Flowers sometimes nodding. Plants up to about 3 ft high but not very dense. Stems reddish. leaves smooth, opposite up to 1" long & nearly 1/8" wide

Sept 22nd Flowering beautifully in APM Bush behind Caldwell's land cleared & planted 1967.

Oct 27th Still flowering Call 5th Road.

Nov 17th " " Dead Horse Gully.

1969 Jan 5th " " "

Aug 31st Flowering in APM property at end of Cochrane's lane.

Oct 4th Flowering at Burgoyne's Gap.

Nov 8th " " Wilson's Prom. This specimen was decidely deep pink with 4 big bracts. The petals were red & the long tubes white. leaves opp. decussate, broadest at tip, & lighter underneath.

1970 Jan 5th Pink form of the plant flowering along Licola Rd.

Aug 9th A.P.M. reserve flowering.

23rd Flowering at Giormandale.

Sept 5th " at new area at Rosedale.

13th " in APM reserve

14th " " Dutson Down Road

19th " Call. 5th. Road

1971 Sept 1 In bud in the Grampians. The leaves are

only about ¾' long and ¼" wide but-
-ds with the 4 broad bracts around the
flower.

1971 Sept 14th Just starting to flower along Callignee
South Road.
Oct 10th Flowering in APM Reserve.
" 24 " " " "
" 27th " " Reid's Corner
Nov 12th " at Whitelaw's Track
1972 Sept 10th " " Rosedale
1973 Aug 4th " " APM reserve
1959 July 11th " " " " (wet year)
1993 Jan 30 " in Errinundra N.P.
1994 Nov 26 " " APM block Stradbroke Sth Gipp. H'way.
Oct 28th " " Tgon Sth Reserve

Notes on Traralgon Slt F & F Res.

Eucalyptus aromaphloia
Juvenile leaves oblong to elliptic, with more or less glaucous tips
subsp. aromaphloia
Juvenile leaves linear to narrowly oblong
subsp. 1.

Eucalyptus Angophoroides
Juvenile leaves green
to ~~15~~ 4 m - (B) 25 m
Bridgesiana J. l. glaucous 25 m.

Pimelea linifolia
Subsp linoides - Grampians & Wilson Prom
~~Green upper surface~~ of leaves ± linear dark bluish green to dark green on upper surface.
Leaf margins ~~recurved~~.
Subsp caesia
Leaf margins incurved usually glaucous upper + lower surfaces similar. NE mountains
Subsp linifolia
Margin recurved or incurved, medium to dark green, narrowly elliptic.

Veltenaea forsythiana
Leaves elliptic to narrowly obovate, widest above middle upper surface green, clearly visible, lower surface reddish-brown & much darker than upper surface.

Veltenaea juniperina
Leaves linear terete or ovate, often cordate, surfaces usually concolorous.

Pimelea micrantha.

1972 Aug 28th Small greyish plant because of silky hairs on leaves + stem. Leaves about ¼" long covered with long silky hairs on backs + fewer hairs on front of leaf. Young growth densely hairy. Leaves alternate.
Did not have flower so little difficult to be sure of identification but P. octophylla has prominent midrib below while in this plant the midrib is not visible for hairs. Did not have description of involucrata so could not compare that.

1973 ~~Sept~~ Oct 28th. Plant growing in Avon Country.

1978 Jan. Synonymous P. curvaflora. P. Micrantha only reduced mallee form of P. curvaflora.
[C Beauglehole - R. Parsons]

Pimelea pauciflora Poison Rice flower.

1997 Jan 19th Growing on Bentley's Plain. A shrub about 4ft high but not in flower.

Pimelea (dicholoma) phyliicoides

1922 Sept 1st Growing in Flat Rock area or Little Desert probably little Desert.
leaves decussate pointing up stem, oval shaped + under high magnification appear to be covered with flat protruberances but whole glabrous. Leaves sometimes spreading. Bracts # larger than leaves. Plant yellowish green but perhaps of dry conditions Branches brown covered with spreading hairs. Identification could be incorrect as we have no flowers.
Pimelea dicholoma leaves are ?.
Identified by Miss Galbraith

Pimelea serpyllifolia

1969 Sept ? Dad brought this flower home from the Jeeralang area. Yellow flower with not many flowers in head. Bracts as big as flowers or almost so.

Pimelea stricta

1972 Aug 27th Flowering on Mt Arapiles or nearby.
leaves glabrous, branches glabrous, calyx
leaves glabrous outside but silky inside.
Flower hairy. leaves opposite, ~~lanceolate~~ linear
narrow tapering to point. Flowerheads
drooping. Calyx ½ as long as flowers
broad but tapering ~~quickly~~ to fine point.

1973 Sept 2nd Flowering at One Tree Hill at Bendigo.

angustifolium

Pittosperum (phyllicoides)

1972 Aug 27th In seed at Mt Arapiles.

2003 June Name change in 2nd ed. of Census

Pittosporum Bicolor (Bangalla)

1967 April 29th Orange berries on plants at South Cascade.
1965 Xmas. Flowering at Bulga Park. at end of bridge.
1967 Sept 23rd Berries on plants along Blackwarry Scenic Rd
1968 Nov 23rd Flowering at Bulga Park
1970 Mch 7th Berries on plants at Waratah Bay.
Sept 15th Flowering Wiaaile Creek Road. Flowers yellow marked with purple rather long stems on flowers. Petals only split to where flowers turn back. Back of leaves very whitish, upper service dark dull green.
1993 Jan 31 Growing in Errinundra N.P.
1994 Jan 15-17 " at Mt. Erica & also Myrtle-beech Walk too.
2006 Sept 15 Growing at Foster (Ralph's CD!

Pittosperum undulatum. (Sweet)

1967 June 19th Plant large tree with clusters of bright orange berries about 17 mm across. Berries showing segments at end. Leaves 3+" long with very wavy edges. Leaves around berries in some branches growing yellow. Berries at end of branches. Plant photographed at Eden foreshore. Also observed plant in Morwell National Park. Leaves with stems about 2 cm long.

Sept 10th Still a few berries at Fosters Gully.

1968 Nov 23rd Berries green at Morwell National Park.

1969 Oct 12th Flowering at Beaconsfield Upper

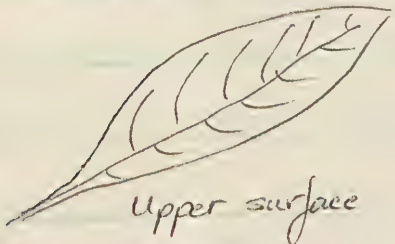
1970 Sept 25th " at Midland Highway. Flowers paler yellow than bicolor and flower stalks longer Flowers have more pendulus appears and petals split right to base. Leaves shiny above and only lighter green underneath. Leaves wavy.

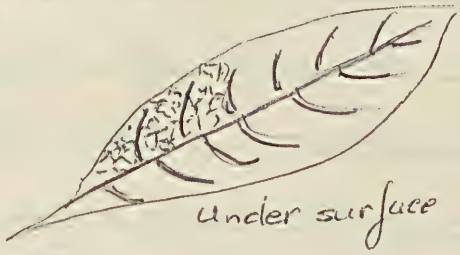
1971 Oct 23rd Flowering in Morwell Nat. Park.

1972 July 23rd Plant growing at Fairy Dell.

1990 April 26th Plant growing near entrance to actual glen at Glen Nayook. Jack Brook's says it has a variety name now P. undulatum var emmettii after bush-walker in Tasmania (Emmett). Jack says it grows at Mt Worth S.P. + other places in the Strzeleckis. Leaves entire 70mm or more long, pointed, tapering into the stem. Underside of leaf lighter but still green.

Veins quite obvious. Upper surface darker than P. undulatum. Three much duller. Stems velvety brown. Think margins of leaves revolute, certainly very revolute when dried. Veins on undersurface netted


Upper surface


Under surface

Apr 12" Growing in Drouin Water Reserve. P. undulatum

Nov 9" Wendy Savage sent specimen growing on their farm. Think it is P. undulatum var. emmettii.

Aug 25" Growing in Newborough bush.

Dec 1 " " " Sandy Ck.

Leaves Alternate, simple, entire, oblanceolate, 7–15 cm long, *wider in the upper half*, tapering gradually to the stalk and drawn out into a point at the tip. Green both surfaces, paler on the underside, upper surface smooth, but often hairy on the underside chiefly along the midrib. Leaf stalks 9–18 mm long.

Venation Midrib and lateral veins visible on both surfaces, more distinct on the underside. Midrib sunken on the upper surface, raised on the underside. Main lateral veins eight to twelve, at 30°–45° to the midrib, curving towards the tip.

Flowers *At first cream but later turning yellow with a deep pink throat*, fragrant. In a loose terminal panicle, 15–20 cm diameter. Flower stalks densely silky hairy, 3–5 cm long. Sepals five, oblong–lanceolate, 6–8 mm long, silky hairy, pale green. Petals five, base erect 2 cm long, lobes spreading 10 mm long, silky hairy outside but smooth within. *Stamens* five, 2 cm long, *curving back and outside the petals*. Flowering period October to November.

Fruit A *capsule, brown, somewhat flattened, pear-shaped*, two-celled splitting into two valves about 4 cm long. The numerous *flat, winged seeds about 12 mm diameter* are packed transversely in the valves. Fruit ripe December to April.

Habitat Rainforest of all types but often in open forest country along the banks of streams. The species appears to reach its best development in rainforest.

Distribution Grose Valley, NSW to Windsor Tableland, North Queensland and New Guinea. Recorded in NSW from Grose Valley; Calga; Colo River; Gap Creek; Scone; Cedar Brush NR; Upper Chichester and Williams Rivers; Woko; Bulahdelah; Cape Hawke; Wingham Brush; Bulga SF; Weelah NR; Boorganna NR; Middlebrother Mountain; Port Macquarie; Doyles River SF; Mt Seaview NR; Pappinbarra; Banda Banda FR; Bellangry SF; Kunderang Brook; Carrai SF; Wollomombi Gorge; Willi Willi Caves NR; Taylors Arm; Nambucca SF; Mistake SF; New England NP; Bellinger River SF; Dorrigo NP; Bruxner Park FR; Coramba Mountain; Coramba NR; Wedding Bells SF; Bagawa SF; Kangaroo River SF; Wild Cattle Creek SF; Hortons Creek; Chandlers Creek; Marengo SF; Guy Fawkes River NP; Newton Boyd; Dalmorton; Gibraltar Range NP and SF; Washpool SF and NP; Ewingar SF; Little Spirabo SF; Forest Land SF; Girard SF; Myrtle Creek; Mt Pikapene SF; Toonumbar SF; Unumgar SF; Beaury SF; Acacia Plateau; Mt Clunie FP; Moore Park; Mt Lindesay and Levers Plateau, Border Ranges NP; Terania Creek; Nightcap NP; Whian Whian SF; Boomerang Falls FR; Boatharbour; Booyong; Lennox Head; Hayters Hill; Mullumbimby; Mt Warning NP; Mebbin SF; Limpinwood NR; Numinbar Creek; Crystal Creek; Couchy Creek; Mt Cougal; Murwillumbah; Round Mountain.

Timber and uses White, tough and close-grained. Seldom used. 680 kilograms per cubic metre.

Regeneration 140 000 seeds per kilogram. Germination is rapid. Seed may be stored for 12–18 months at room temperature, or even longer at +2°C.

Pittosporum bicolor

Pittosporum bicolor Hook.

Reference Journ. Bot. 1:249 (1834).

Derivation Pittosporum from Greek 'pitta' pitch and 'sporos' a seed, referring to the sticky mucilage surrounding the seeds; bicolor from Latin 'bi' two and 'color' colour, referring to the leaves being dark green above and silvery grey beneath.

Common name Banyalla, Cheesewood, Whitewood.

Standard trade name Pittosporum.

Habit A small tree up to 18 m high and 35 cm diameter. Often epiphytic on soft tree ferns.

Trunk Not buttressed, cylindrical or often irregular, straight.

Outer bark Grey–black or dark brown smooth with horizontal elongated raised lenticels, or platy. Underbark brown. Outer surface of live bark pale green or dark red.

Inner bark Blaze on a tree 35 cm diameter, creamy orange turning slightly paler orange on exposure. Yellow–brown on older trees. Lingering bitter taste and no smell. 10 mm thick.

Branchlets Moderately slender, at first with silver–fawn but later with yellow–brown felty hairs. Leaf buds with grey–brown hairs.

Leaves Alternate or crowded towards the ends of the branchlets, simple, not toothed, the margins rolled

Bon – pto. Floyd agrees with Neville that hybrid status unlikely for emmettii or 'aff. bicolor'

under, oblong to lanceolate, 2–7 cm long rounded or occasionally pointed at the tip, tapering quickly at the base. *Dull dark green above* without hairs on the mature leaves, but with *shiny silver–grey hairs below*. Leaf stalk 2–5 mm long, silvery grey to rusty brown hairy, particularly when young.

Venation Midrib and main lateral veins distinct and sunken above, midrib raised and conspicuous below but the lateral veins less so. Main lateral veins three to eight at 30°–45° to the midrib.

Flowers Yellow and purplish, clustered or solitary at the ends of leafy branches on long stalks 10–15 mm long, bell-shaped. Sepals five, oblong or lanceolate, spreading, 3–6 mm long, yellow–green, downy. Petals five, joined for three-quarters of their length into a tube and with the free tips curled back, 7–15 mm long, purple and yellow. Stamens five, as long as the tube. Ovary furry. Flowering period September to November.

Fruit Capsule, orange–yellow turning grey–black when ripe, rounded and slightly compressed with a conspicuous pointed style and an irregular knobbly surface, 8–13 mm long, covered in light grey hairs, opening into two thinly woody valves. Seeds bright orange–red, shiny and sticky, 15–25 angular, 2–3 mm diameter. Fruit ripe March to July.

Habitat In cool temperate rainforest with *Eucryphia moorei*, *Elaeocarpus holopetalus*, *Nothofagus cunninghamii* or *Atherosperma moschatum* on granite or metasediments along the tablelands escarpment and in mountain gullies.

Distribution Tasmania to Captains Flat, NSW. Recorded on the mainland from Otway Ranges; Apollo Bay; Dandenong Ranges; Upper Yarra; Baw Baw NP; Tarra Valley–Bulga SP; Wilsons Promontory NP; Bemm River; Errinundra FR; Bibbenluke; Glenbog SF; Werrinook FP; Bega Swamp; Leather Barrel Ck, Kosciusko NP; Geehi; Dampier SF; Upper Deua River; Gourock Range, Tallaganda SF; Rossi.

Timber and uses Pale or yellowish white. Usually too small to be used, but could be suitable for axe handles, carving and wood engraving. 800 kilograms per cubic metre.

Regeneration 205 000 seeds per kilogram. Fresh seed should be sown.

Pittosporum sp. aff. *bicolor*

Reference Not recorded.
Derivation Not recorded.
Common name None.
Standard trade name None.

Habit Small tree up to 18 m tall and 25 cm stem diameter. An attractive specimen tree with bright green foliage and pyramidal shape.

Trunk Straight, not buttressed.

Outer bark Grey to dark brown–black, smooth with transversely elongated raised lenticels. Underbark light brown. Outer surface of live bark with green and creamy brown streaks.

Inner bark Blaze on a tree 25 cm diameter *white turning dirty grey–brown*. Sapwood margin also turning dirty grey. Delayed bitter taste. No smell. 7 mm thick.

Branchlets Slender, leafy section purplish with fawn hairs, older part fawn, glabrous, smooth or splitting longitudinally. Leaf buds conical, fawn, silky hairy, enclosed in ovate-pointed scales 1–2 mm long and leaving several rings of scars on the stem.

Pittosporum sp. aff. *bicolor*

Leaves Alternate, but also in *pseudowhorls of three to five* simple, entire, *lanceolate to broad lanceolate* leaves, *4–12 cm long* but commonly 6–8 cm long (2–7 cm in *P. bicolor*). Tapering to a rounded or short-pointed tip, and more quickly tapering at the base. Shiny, glabrous except for the hairy midrib, *bright green above; dull, glabrous* or very sparsely hairy (densely hairy in *P. bicolor*) *pale green beneath*. Resinous odour when crushed. Leaf stalks 3–5 mm long, fawn hairy on young leaves otherwise glabrous, purplish at first, later green.

Venation Midrib prominent on both surfaces, sunken and fawn hairy above, raised and almost glabrous below. Main lateral veins just visible, slightly more conspicuous beneath, five to ten pairs, curved, at 45° to the midrib.

Flowers Reportedly pink in bud, cream on opening and then tending pink when aged.

Fruit *Capsule*, woody, green with creamy grey matted hairs but later *black* and *hairy*, ovoid, somewhat two-lobed, 9–10 mm long excluding the persistent black-tipped style 3 mm long. Splitting into two valves, each with a central partition and yellow interior. *Seeds ten to twenty, orange–red, shiny, sticky*, angular, 2 mm long. Fruit ripe March to May.

Habitat In cool temperate rainforest with *Nothofagus cunninghamii* in the Otway Ranges or with *Elaeocarpus holopetalus* and *Atherosperma moschatum* at Werrinook FP near Bega, NSW.

Distribution Melba Gully and Forest in the Otway Ranges, Warragul and Korumburra in Gippsland and Werrinook FP west of Bega, NSW. The Tasmanian

endemic *P. undulatum* ssp. *emmettii*, which extends from north-western Tasmania to King Island, midway to Cape Otway could perhaps be closely related to or even identical with this mainland species. True, *P. undulatum* does not occur naturally in the Otway Ranges, and hence a possible hybrid origin between *P. bicolor* and *P. undulatum* is unlikely.

Timber and uses Too small and rare to be used.

Regeneration Not recorded.

Pittosporum rhombifolium Cunn. ex Hook.

Reference Hook. Ic. Pl. t. 621 (1844).

Derivation Rhombifolium from Latin 'rhombicus' shaped like a rhomb or diamond-shaped and 'folius' a leaf, referring to the diamond-shaped leaves.

Common name Diamond-leaf Pittosporum, Hollywood, Diamond-leaf Laurel, White Myrtle, White Holly.

Standard trade name Pittosporum.

Habit A small tree up to 25 m high and 45 cm diameter. Popular as a street tree because of its white flowers and showy orange fruits.

Outer bark Pale grey, vertically fissured and somewhat corky. Underbark cream. Outer surface of live bark light green.

Inner bark Blaze on a tree 20 cm diameter, pale brown, patterned with darker brown lines, and a pale layer next to the sapwood. The blaze changes to a darker brown on exposure. No taste but a mango smell. 4 mm thick.

Pittosporum rhombifolium

Branchlets Slender, grey, dotted with scattered lenticels.

Leaves Alternate, simple, *toothed irregularly in the upper half*, entire on the lower half, very coarsely toothed in coppice, smooth and green both surfaces, paler beneath, rhomboid or *diamond-shaped*, tapering to a point, 5–10 cm long and 2.5–4.0 cm broad. Stalks 10–20 mm long, smooth, green and channelled on the upper surface.

Venation All veins distinct on both surfaces.

Flowers Numerous, white and rather small, in a dense terminal compound corymb 7–10 cm broad, the branches sometimes minutely glandular. Sepals blunt, 1–2 mm long. Petals oblong, about 6 mm long, spreading from below the middle. Ovary shortly stalked. Flowering period November to January.

Fruit *Capsule, yellow, pear shaped, 9 mm long* containing *two or three black oval seeds*, 3–5 mm long. Fruit ripe mainly February to May.

Habitat Common in the rainforests on the red basaltic soils.

Distribution From the Richmond River, NSW to the Forty Mile Scrub, North Queensland. Recorded in NSW from Toonumbar SF; Unumgar SF; Yabbra SF; Beaury SF; Tooloom; Acacia Creek; Koreelah SF; Levers Plateau, Border Ranges NP; Dunoon; Wilson Park; Boatharbour; Davis Scrub NR; Broken Head NR; Goonengerry; Brunswick Heads NR; Burringbar.

Timber and uses Whitish, tough rather hard, close-grained. Could be suitable for carving, engraving and fruit cases. It should be a useful ornamental tree for street planting.

Regeneration 51 000 (fresh) to 83 000 (dried) seeds per kilogram. Fresh seed should be used and sown immediately. Germination is slow, beginning after 50–60 days, with completion after 90–135 days, with 35% germination. Seedlings with lanceolate cotyledons, 10 mm long, not toothed. First six leaves whorled, rhomboid with two teeth either side on the apical half of the leaf.

Pittosporum undulatum Vent.

Reference Hort. Cels. t. 76 (1802).

Derivation Undulatum from Latin 'undulatus' wavy, referring to the leaf margin.

Common name Sweet Pittosporum, Mock Orange, Native Laurel, Wave-leaved Pittosporum, Engraver Wood, Native Daphne.

Standard trade name Pittosporum.

Habit A tree up to 20–25 m tall and 75 cm diameter. A fine ornamental species with dense attractive foliage and fragrant flowers. The leaves may be blackened by mould from scale insect attack.

Trunk Often flanged at the base in large trees and frequently crooked.

Outer bark Dark brownish grey, rough and scaly or finely fissured, *dotted or with vertical lines of paler lenticels* on mature trees. In younger trees the bark is smoother and the paler lenticels show out more distinctly. Underbark pale brown with cream horizontal elongated lenticels. Outer surface of live bark creamy fawn.

Inner bark Blaze on a tree 35 cm diameter, the outer one-third yellowish brown, the remainder silvery

RAINFOREST TREES

of Mainland South-eastern Australia

A.G. FLOYD

Forestry Commission of New South Wales

1989

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Morris, D. I. & Curtis, W. M. 1974. Records of the Queen Victoria Museum No. 50 p. 1–5. See below for title.

pubescentes, interiores solum ad apicem pubescentes, marginibus ciliatis. Receptaculum turbinatum, pubescens; sepala 5 - 6 mm longa, angusta triangularia, pubescentia, sanguinea, glandibus punctata, marginibus ciliatis, involutis. diametro, apex tholiformis, primo pubescens tandem stratum exterius secedens, capsula matura lignosa, squamata, sepalis erectis, persistentibus certe per primam aetatem et saepe longius.

Holotypus: west side of bridge over Huon River, Tahune Forest Park, Tasmania, leg. D. I. Morris, 7. i. 1974 (Herb. Univ. Tasmania, *Isotypus* in Herb. Kew et Queen Victoria Museum Launceston).

the original description.

Pittosporum undulatum Vent., Descr, Plant. Nouv. Jard. Cels. 76 (1802)
subsp. *emmettii* W. M. Curtis, subsp. nov.

Arbor parva ab ssp. *undulato* distincta habitu erecto et capiti parvo; folia parviora (c. 4 - 9 cm longa, 1.5 - 3.0 cm lata) et teniora, plana vel laminis prope apicem aliquandum parum tortis sed marginibus vix undulatis; flores parum grandiores et in pedicellis recurvis longioribus (1.0 - 2.5 cm longis); petala carina, exteriora in alabastro puniceis suffusa, erubescentia ubi incolorascentia.

Holotypus: Orford, Tasmania, leg. F. Hood, 27. ix. 1973 (Herb. Univ. Tasmania, *Isotypus* in Herb. Kew et Queen Victoria Museum Launceston).

Small trees of this subspecies of *Pittosporum undulatum* were first found by S. B. Emmett at Mount Ramsay, c. 12 miles S.S.W. of Waratah, Tasmania in the spring of 1874. A herbarium specimen of this date (in the National Herbarium, Melbourne) was labelled by F. Mueller "*Pittosporum undulatum* var. *emmettii*", but this combination was not published. In now according the taxon subspecific rank I am retaining the epithet suggested by Mueller in honour of the discoverer of this plant.

No further records of the tree were obtained for almost a hundred years until, in 1973, flowering material was discovered in two widely separated areas. Mr. F. Hood at Orford had, about 30 years previously, removed several small plants from The Thumbs (Orford) to his garden where they flowered for the first time. Mr. E. B. Clayton found trees near the Forth River, on the bank of the Mersey river near Railton, and on Kelcey's Tier near Spreyton, and he was able to collect both flowers and fruits.

A small tree distinguished from ssp. *undulatum* by its erect habit with small crown; leaves smaller (c. 4 - 9 cm long, 1.5 - 3.0 cm broad), of thinner texture, flat or the blade sometimes slightly twisted near the apex but the margins scarcely undulate; flowers slightly larger and on longer recurved pedicels (1.0 - 2.5 cm long), petals creamy-yellow with outer surfaces flushed with crimson in the bud stage, tending to become pink when fading.

Helichrysum backhousii F. Muell. ex Benth., Fl. Austral. 3: 632 (1867)
var. *kingii* W. M. Curtis, var. nov.

Frutex incanus effusus ramosissimus, c. 1 m altus, a varietate typica differt: indumento conspicuo, foliis parvioribus angustioribusque et odore aromatico. Ramuli tomentosi. Folia oblanceolata vel angusta-obovata, c. 4 - 7 mm longa, 1.5 - 3.0 mm lata; folia juniora superficie inferiore ferente indumentum densum pilorum tenuium implexorum et pilorum breviorum glanduliferorum intermixtorum; superficie superiore molliter tomentoso pilis simplicibus glanduliferis; folia vetustiora superficie glabrescenti. Capitula varietate typica angustiora et

Title of paper is 'Recent additions to the Tasmanian flora & some notes on nomenclature'

Copy to Bob

R.F.PARSONS
Botany Department
LaTrobe University
3083 Australia

14 May 98

Dear Jackie — Pittosporum

Yes I do remember meeting you years ago; it's good to hear from you.

I'm interested in this P. u. ssp emmettii story partly because Tasmania only has P. bicolor & P.u. ssp. emm., the latter occurring in at least 5 places even tho' Tas. lacks any P. undulatum, one of the so-called "parents". This makes it rather hard to sustain the hybrid argument in my view.

So it's beaut that you are trying to germinate some seed — please keep me posted on the results. If you get any seedlings, it's worth noting that P. bicolor seedlings are said to have 3 cotyledons (how bizarre!).

Neville Scarlett tells me that the plants that the Flora of Vic. calls P. u. ssp. emmettii are rumoured to be sterile, so some idea of what % of seeds germinate would be handy.

It's interesting that your trees drop their fruits unopened. I'd be interested to know if you had to prise the fruits open to get the seeds out & if the seeds are filled & look normal.

Best regards

Bob P.

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12 May 1998

Dr R Parsons
Botany Department
La Trobe University
Bundoora VIC 3083

Dear Dr Parsons

***Pittosporum undulatum var. emmettii* (?) or hybrid**

Bon Hull told me that she sent you a sample of leaves, flowers and fruit from a *Pittosporum* sp. small tree growing on the fenceline of my block at Yarragon South. I have seen the correspondence from you and we (my neighbour Wendy Savage, who collected the original specimen and I) are attempting to grow some seedlings from additional fruit collected as suggested in your correspondence to Bon.

In addition to the original tree, Wendy and I discovered four similar trees in another part of the bush which totals about 30 acres of wet gully/*Eucalyptus regnans* and regrowth of *Acacia dealbata*. The block has been logged but most of the Mountain Ash is old growth, to 60 m with the tops blown out. The largest of the *Pittosporum* sp. trees is about 13 or 14 metres tall with three other trees down the slope (south facing) to four metres high. I suspect that the larger tree has produced the seeds for these rather straggly specimens. Fruit from the trees appears identical to *P. bicolor* but the trees drop unopened fruit while *P. bicolor* fruit opens on the tree. Banyalla is common in my bush but the nearest *P. undulatum* is one to two kilometres away. If it is a hybrid it is certainly breeding true.

I spoke to Dave Ashton about it and he seems inclined to the hybrid theory. You probably do not remember but I met you when you had study leave (or maybe some other leave) in Botany at the University of Melbourne in the later years of the 1970's. I was doing a PhD in palaeobotany with Carrick Chambers and I recall that you were working with Dave who is one of my favourite people. If you ever fancy a trip to Gippsland to inspect the trees, I would be delighted to see you (and Dave) although I intend asking him down in the spring anyway.

With best wishes

Jackie Tims

Fl. NSW.

of branches, ovate to rhombic, 6–11 cm long, 30–50 mm wide, margins coarsely toothed, especially towards apex or rarely ± entire, the teeth rounded to acute, glabrous; petiole 10–20 mm long. Flowers in dense, terminal, many-flowered, branched corymbs. Sepals 1.5–2 mm long, minutely ciliate. Petals c. 6 mm long, white. Ovary hairy. Capsule obpyriform to ovoid or globose, 4–6 mm long, smooth, ± glabrous, yellowish to orange; seeds 2 or 3, black. Flowers spring–summer. Grows in well-drained near-coastal situations in rainforest and dry vine scrub, occasionally in drier woodland; north from Alstonville district. NC; Qld.

Commonly cultivated in warmer districts as an ornamental. The record for CC in Jacobs & Pickard (1981) is based on a cultivated specimen.

3 *P. phylliraeoides* DC. **Weeping Pittosporum, Butterbush, Berrigan**

Shrub or tree to c. 10 m high, almost glabrous throughout; branches pendent. Leaves alternate, oblong or linear-ovate or narrow-elliptic, 4–12 cm long, 4–12 mm wide, apex with a small hooked point, margins flat, glabrous; petiole c. 10 mm long. Flowers axillary, solitary or in sessile to pedunculate few-flowered axillary or terminal clusters, sometimes unisexual, fragrant. Sepals 1.5–3.5 mm long, ciliate. Petals usually 7–10 mm long, yellow to cream. Ovary glabrous. Capsule compressed-ovoid to -globose, 8–18 mm long, smooth, glabrous, yellowish, often slightly depressed at pedicel junction; seeds usually 6–8, dark or orange-red. Flowers winter–spring. Grows in woodland and mallee, and widespread on sandy soils in the arid zone, chiefly in inland districts, west from Muswellbrook. NWS CWS NWP SWP NFWP SFWP; mainland States. [*P. phillyraeoides* DC.]

Branches often cut and used as stock fodder during periods of drought.

4 *P. bicolor* Hook. **Banyalla**

Shrub or tree 3–10 m high. Leaves alternate, usually lanceolate to narrow-oblong, 3–8 cm long, 5–18 mm wide, apex subacute to obtuse, margins flat to recurved, lower surface usually densely hairy, rarely ± glabrescent with age; petiole 2–3 mm long. Flowers usually terminal, solitary or a few together. Sepals 3–6 mm long, with few to many hairs. Petals 8–11 mm long, yellow with purple-maroon markings. Ovary hairy. Capsule globose, 5–8 mm long, hairy, grey, valves dark on the inner face; seeds few to many, red. Flowers spring. Grows in montane wet sclerophyll forest, often in gullies, below c. 1300 m alt., south from Captains Flat. SC ST; Vic., Tas.

Some specimens from the Bega district have larger leaves (to 12 cm long and 30 mm wide) and are sparsely hairy on the lower surface. They appear to be hybrids with *P. undulatum*. [*P.* species aff. bicolor in Floyd (1989)]

5 *P. undulatum* Vent. **Pittosporum**

Tall shrub or tree to 15 m high, glabrous on vegetative parts except for a few hairs on young growth. Leaves alternate or clustered at end of branches, ovate or elliptic to oblanceolate, usually 6–15 cm long, 15–40 mm wide, apex acute to acuminate, margins usually undulate or occasionally flat, lacking teeth, mature leaves glabrous; petiole 12–15 mm long. Flowers in terminal clusters, fragrant. Sepals 6–10 mm long, ± hairy outside. Petals 10–12 mm long, white to cream. Ovary hairy. Capsule globose to ± obovate, 10–14 mm long, c. 10 mm diam., smooth, sparsely hairy or glabrescent, light orange to yellow-brown; seeds numerous, red-brown. Flowers spring. Grows in rainforest and wet sclerophyll forest and sheltered situations in dry sclerophyll forest or woodland; widespread on the coast and ranges, west to lower valleys of the Nandewar Ra. and Rylstone. NC CC SC NT CT ST NWS CWS; Qld, Vic., Tas., S.A. [*P. undulatum* Andrews]

Can be an aggressive post-fire coloniser of the understorey in sclerophyll forest. In the Sydney district it can be a troublesome invader in disturbed sclerophyll forest.

Possibly hybridizes with *P. bicolor* in the Bega district; see note under that species.

6 *P. revolutum* Aiton

Shrub to c. 3 m high. Leaves alternate or clustered at the end of branches, obovate

Plantains that usually may occur in the Latrobe Valley

**Plantago coronopus subsp coronopus* Buck's-horn Plantain

Leaves pinnately or bipinnately lobed, 1-8 (-30)cm., pilose; corolla tube hairy on lower half. Flowers dense.

**Plantago major* Greater Plantain

Leaves entire or toothed, leaf lamina ovate to broad-elliptic 2-12cm wide with petiole about as long as lamina 4-22cm long. Flowers long & dense, ovules and seeds 8-16.

**Plantago lanceolata* Ribwort

Leaves entire or toothed, glabrous to pilose, lead lamina narrower than *P. major* or petiole shorter than lamina, 7-20cm long, peduncles with conspicuous longitudinal ridges, spikes dense and short, ovules and seeds 2-5.

Plantago debilis Shade Plantain

Leaves narrow-oblanceolate to obovate mostly 3-15cm long & 8-40mm wide, margins entire or toothed petiole to 10cm long. Leaves rather thin texture. Spikes mostly more than 6cm long and flowers very fine and separate.

Plantago varia Variable Plantain

Leaves linear elliptic, usually 5 times longer than wide, pilose with hairs 1mm, leaf axils with tufts of red-brown to golden-brown hairs 2-6mm long. Flowers almost touching.

Plantago gaudichaudii Narrow Plantain

Leaves linear to linear-elliptic, at least 15 times longer than wide, glabrous to pilose. Flowers touching but not really dense.

alpestris

Plantago (tasmanica) Tasman Plantain

1972 Jan 30th Flowering at Mt Hewitt

1978 Jan. Synonymous P. alpestris Briggs + others
Contr. N.S.W. Nat. Herb. 4 : 395 (1973)
[C. Beauglehole & R. Parsons]

* Plantago coronopus Buck's-horn Plantain.

1992 April 25th Plant growing in Nooramunga Coastal Reserve. Plant with neat rosette of narrow serrated leaves & flower stalk about 3" high.

1994 May 1 " " " Austen's property near Darlamurla.
Oct 30 " " " Dawson's R'way Reserve.

1996 Oct 12th " " Paradise Beach at 2nd pipeline in N.P.

2002 Nov 30th " " Toongabbie Wetland.

Plantago debilis — Shade Plantain

1993 Jan. 31 Plant growing in Errinundra N.P.

1994 May 1 " " " Austen's property near Darkamurka

Plantago euryphylla

1992 Jan 25th Flowering near damp area near Buckely Plains. Identified from McCann's book 'The Alps in Flower". It has hairy broad leaves + flower is a long influrescence nearly as long as the peduncle. Do not have description yet as it will be in Vol. 3 of Flora of N.S.W.

1992 Jan 16th Flowering at Mt. St. Cuvinear + Mt. Erica. Flower stalk considerably longer than leaves. Veins on leaves 5-9, margins entire.

Plantago gaudichaudii Narrow Plantain

2007 Oct 18 Plant flowering at Dawson & identified by Ken Harris. leaves linear to elliptic at least 15 times longer than wide, glabrous to pilose. Flowers touching but not really dense. Flora of Vic.

Plantago gaudichaudii Narrow Plantain

1994 Nov-1 Flowering in Casuarina Reserve Fulham.

*

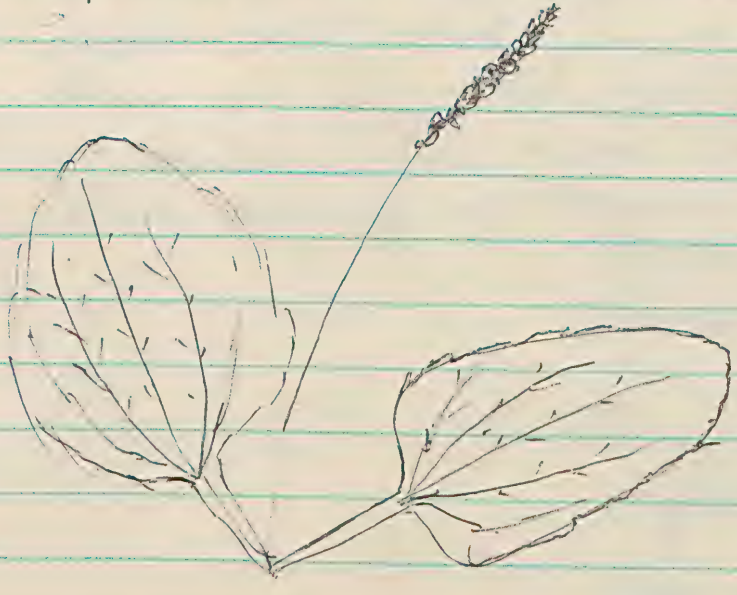
Plantago lanceolata. Ribwort.

1992 Oct 26th Flowering along the lane.
leaves 8cm broadly lanceolate, hairy with silky, soft hairs.
Petiole 4cm as long as leaf in our specimen, ribbed on back but single deep groove on front, hairy.
Scape very long - 18" in our specimen - ribbed with 5 ribs conspicuously groove.
Flower in cylindrical shape 2½ cm long. Individual flowers have bracts & sepals which are brown, broad & pointed, bracts (1) accuminate longer than sepals (4) stamens 4 like tiny white pointed bladders on long fine hairy filaments. Style hairy stalk with tiny dot on top.
A fascinating flower to look into.

1993 Jan 31 Plant growing between Club Terrace & Combienbar.
1994 May 1 " " in Austen's property near Parlamanla
Nov 26. " " " APM block Stradbroke Sth Gipps Hway.
Nov 1 " " " Casuarina Reserve Fulham.
Oct 30 " " " Dawson Water Reserve
" " " " " R'way "
1995 Apr 12th " " " Drouin Water "
1999 Oct 16th " " " Bonbe Wetland, Darnum.
2000 Apr 11th " " " Heyfield "
2001 Nov 3. " " " Newborough bush.
Dec 1 " " " " " Sandy Ck
2002 Nov 30th " " Toongabbie Wetland.

* Plantago major Greater Plantain

1992 Dec 11th Flowering along our lane though smaller than usual – may be because of drier conditions or may be early in the season. leaves 9 cm long × 4 cm wide at widest part. leaves with 3 prominent long veins commencing from petiole + 2 smaller veins at sides. leaves shaped abruptly into petiole. Leaf blade ovate with wavy, irregularly toothed margins – blade 5.5 cm petiole 2.5 cm. Flower ~~spike~~ 7 cm high consisting of scape of 5.5 cm long + spike 3 cm long with flowers densely arranged. Scapes round hairy – flowers appear glabrous – petals + calyx brown, small.



1994 Feb 28th Flowering along Grand Ridge Road. Flowers not much higher than leaves.

1995 Apr 12th Growing in Drouin Water Reserve.
Jan 15th " on Dargo weekend.
Oct 25th " – Mt Hedlock.
1996 Jan 20th " " Hotham weekend at Paw Paw Plain.
2000 Apr 11th " " Heyfield Wetland.
2001 Nov 13 " " Newborough bush
Dec 1 " " " Sandy Ck.
2002 Nov 30th " – Toongabbie Wetland.

Plantago varia — Variable Plantain.

1992 Jan 30 — Flowering at Mt Hewitt

1992 Nov 26 — Plant finished flowering. Different form usual form so not sure of identification. Leaves all basal + breaking off from root in a caplike structure. Leaves 23 cm long, narrow because rolled. When flattened about 5mm wide. Main vein conspicuous but other inconspicuous. As they dry leaves curling back into semicircle. Flower spike taller than leaves with flowers separated but in dead specimen appearing in pairs. Calyx hairy + petals (dried) erect [illegible] I think. Scape very hairy. Plant growing in swampy area at Rosedale Railway station along railway reserve.

1994 Nov 1. — Plant growing in Casuarina Reserve Fulham

Oct 28 — " " " Tgon Sth "

30 — " " " Dawson Water Reserve.

30 — " " " R'way "

1995 Dec 12 — " " " Railway Reserve near Traralgon.

2000 Apr 11 — " " " Heyfield Wetland.

2002 Apr 27 — " " " " "

2004 Apr 3 — " " " Colley's Rd. Block.

2006 Sept 30 — " " Seven's Track.

Platylobium Formosum (Handsome Flat-Pea)

1966 Sept 18th Flowering in Reserve and along Sunday Rd.
Nov 13th Seed pods on plants. Very beautiful. Flat about $\frac{3}{4}$" x 1" with wide hairy ~~crim~~ red band about $\frac{1}{8}$" wide across bottom of pod. Also very fine similar band across the top. Seeds just above lower band.

1967 Sept 23rd Flowering in Gormandale Reserve
Oct 8th " " APM Reserve and tiny pods also.

1968 Sept 15th " in Gormandale Reserve.
22nd " APM ~~Reserve~~
Nov 17th " and in seed at Dead Horse Gully

1969 Aug 29th " at Granite Rock in full bloom.
Sept 21st " at APM Reserve
Oct 4th " at Heyfield also had pods on plants

Nov 2nd Still flowering at Briagalong.

1970 Aug 23rd Flowering at Holey Hill Trig Pt.
Sept 13th " " APM reserve.
Oct 1. " new area Rosedale
17th " at Briagalong

1971 Sept 19th " at Dead Horse Gully.
Oct 10th " in APM reserve. also variety very pale with light reddish brown in Rosedale area

1972 Jan 30th Plant growing at Mt Howitt.
Sept 10th Flowering at Rosedale.

1994 Nov 26 Plants in APM block Stradbroke 5th Gipp. Hway
Nov 9th " on Licola weekend.

1995 Oct 28th " on Wonthaggi Heathlands.

1999 Jan 25th " " Celantipay weekend.

2002 Nov 23rd " " Holey Plains State Park.

Platylobium Obtusangulum (Common)

1966 Oct 8th Flowering opp. Chester Park, Calligree Sth Rd.
1967 Oct 22nd " " " " " "
Nov 12th " at Ciormandale Reserve
1968 Sept 15th In bud " " "
Oct 20th Flowering opp Chester Park.
1969 Sept 4th " at Wilson's Prom.
Oct 12th " " Beaconsfield Upper
19th " " Chester Park.
1970 Oct 1 " in new Reserve Rosedale
1971 Aug 29th Plants growing in the Grampians
Oct 10th Flowering at Rosedale.
24th Flowering at APM Reserve. + Reids Corner.
1994 Nov 26th Plants in APM Blake Stradbroke Sth. Gipp. Hway
Oct 28th " " Tyon Sth Reserve.
1995 Oct 28th " " Wonthaggi Heathlands
2002 Nov 23rd " " Holey Plains State Park.

Platysace ericoides

1971 Jan 29th Flowering near Glenmaggie.
Bush about 1ft high, leaves around stem, one at a time, lanceolate, ½" long app. 2 mm wide, tiny brown point at apex, surface rough with pimples and edge or margin very finely toothed only visible under a glass. Margin recurved. Undersurface very similar but paler green. Flowers on end of short branches, leaves right up to flowers! Flowers tiny cluster into an umbel, 5 petals. Umbel about ½" across, very lacy looking.

1977 May 14th Plant flowering on Harrup's Highway in Mullingdung Forest, just past Kangaroo Swamp road going South - on left-hand side of road.

1984 Jan 10th Plant flowering on Boodyarn Road near ~~Kangaroo~~ Grasstree Swamp Road.

1991 Oct 12th Plants in bud at Mt. Hedrick

1995 Oct 25th " on Mt Heddrick.

Platysace Heterophylla. (Slender)

1967 Jan 14th Flowering in swamp area opp Waterlily pond, Yallourn Nth. + on opp side of road

June 19th Flowering in reserve at Eden. Tufted plant, leaves almost circular to rounded triangular, alternate & close on stem. Leaves dark green. Flowers tiny in clusters with slightly ~~red~~ maroon outside, white in color starry, flat umbels. buds pink.

1969 Feb 16th Flowering Rosedale near swamp. Flowers on long branched stalks. Leaves fine narrow in threes just joined at base V. Seed flat with indentation C.

1970 Oct 19th Flowering at Briagalong.

1973 May 13th " " Rosedale

1986 Jan 11th " " Anderson's Track near Early Road.

1987 Aug 1st " " " at Waterlily Block.

1995 Feb 6th " " " .

Platysace lanceolata (Slender.P.)

1967 April 1st. Flowering near Golden Beach turnoff. Flowers in umbels at end of branches. Flowers very tiny. Oval dark leaves, reddish on edges, dark stems.

1969 Feb 16th Flowering Lime Pit Rd. Rosedale.

1970 Jan 2nd " at Burgoin's Gap. A really delightful plant. Flowers in delicate umbels. Flowers white but backs of petals red.

May 3rd Flowering at Glengarry North, though not in profusion. Many plants without any flowers at all But plants with flowers had many umbels in bloom.

Leaves broadest at tips coming to point alternate ~~quarterly~~ on quarterly round stem, taking 4 leaves to complete circle. Appear to me to have brown stipule like marks under the leaves. Quite a branched shrub up to 2ft high. Flowers in terminal umbels, one umbel to each branchlet. Flowers - five white petals - tiny - starry effect.

1974 Dec 7th Flowering at Burgoin's Gap.

1983 Dec 4th " near " "

1984 Jan 12 " on Anderson's Track area

1991 Jan 27 " during Gelantipy weekend.

1993 Jan 30 " on road from camp behind Cann River area.

1994 Nov 9th Recorded for Licola weekend.
1999 Jan 23rd " " Gelantipy "

Pectranthus parviflorus Cockspur Flower.

1970 Oct 17th Flowering Briagalong. Identified by Miss Galbraith. One of the Mint Family like Ajuga. About 1/16" high flower stalk with thick broad hairy leaves with lobed margins. Leaves app 4 cm long + 3.5 cm wide greyish green on long 2 cm purplish hairy stems.
Flowers deep blue with two lips, the lower lip much longer than the upper. Upper lip 2 lobed + spreading + erect. Flowers in clusters around dark purplish hairy stalk ~~at~~ Clusters about 2 cm apart when flowers mature.

1994 Nov 9th Recorded for Licola weekend.

1995 Oct 25th " on Mt Heddrick

Platorrhiza tridentata — Tangled Orchid

1993 Jan 30 Members of club saw plants pointed out by James Turner on bush walk back towards Club Terrace from Combienbar camp. I did not see them.

Pleurosorus rutifolius Blanket Fern

1970 Jan 3rd Burgan's Cap. This was Cloak Fern.

1971 Aug 30th Plants growing amongst rocks in Mt Zero in Grampians also at Flat Rocks. Also in the McKenzie Falls area.

1994 Nov 9th Recorded for Wcola weekend.

* Poa. annua. Winter Grass.

1992 Oct 29th Growing along our track. (One we call Water Grass).
Fine low plant. Panicle triangular with slender spreading branches. Leaves blunt.

1995 Dec 12" Growing along Railway Reserve near Traralgon
2001 Aug 23" " in Newborough bush.
2002 Nov 14" " " Railway Reservoir Reserve, Tyers.

Poa labillardiera Tussock-grass.

1994 Feb 21. Growing on Grand Ridge Road.
Dainty grass with panicles spread at maturity.
8 spikelets attached to one place on culm. There are bare pedicles before spikelet & spikelets of varying lengths. Plants about 1m high.

1994 Oct 30th Growing in Dawson Water Reserve
30 " " " R'way "
1995 Dec 12 " " Railway Reserve near Traralgon
1996 Dec " " Railway Reservoir Conservation Reserve, Traralgon
2001 Dec, " " Sandy Ck bush, Newborough.
2002 Nov 30th Flowering in Terrangabbie Wetland.
2004 Oct 26th " on Longford Road. Think it would be var labillardierei. Spikelets in 3s + whole plant had reddish-purplish colour. Colour mentioned in Flora of Victoria. Think it was part of P. australis in Willis.

Poa (australis) performis Tussock Grass

1994 Nov 26th In seed in APM block Stradbroke Sth. Gipp. H'way
Nov 1 " " " Casuarina Reserve Fulham.
1997 ~~Ad~~ Apr 5th " " " APM Reserve - Grand Ridge Rd.
2003 June P. australis was not in 7th ed. of Census. It disappeared between the 2nd & 3rd editions of the Census. Traced it through Flora of Victoria.

* Poa pratensis Kentucky Blue-grass

1996 Apr 22nd Growing in lot 213a Rosedale.
Written up in grasses & sedges book.

Poa sieberiana Tussock Grass

1992 Aug 1?) Growing in Rosedale Railway Reserve west of station.
Fine plant with dark glumes a bit like snow grass. Spikelets radiating around stem in ± 4s. Plant a tussock growth.

1994 Nov 1. Collected specimen at above reserve.

2000 Dec 3rd Growing in Sweetwater Ck. Reserve.

Podocarpus ~~alpina~~ lawrencei Mountain Plum Pine.

1968 Jan 18th Found plants but not in flower. Flowering on previous trip to Baw Baw at end of Jan.

1991 Jan 30 Mr A. Morrison reports this plant for the Mr Hawitt Weekend.

1990 Jan 6. Found plants in flower, both male & female, at Mt Buffalo. They were growing under little bridge near well of lake Catani.

1995 Jan 15th Recorded for Dargo weekend

1996 " 20th " " Hotham " at village.

2006 " 19th " " Mt St. Gwinear

Podolepis hieracioides long Podolepis

1999 Jan 24th Recorded on Gelantipy weekend.

~~Rhodo~~ Podolepis Jaceoides

1967 Feb 6th Flowering at Erica. Yellow daisy, leaves like centuary. juicy yellow green.

1970 Jan 24th Flowering at Wulgulmerang. Bracts transparent involcular long, bracts gives it a hairy appearance because they are so loose. About 2 rows of ray florets divided at tip. A rather loose flower. Stem almost black with white hairs. leaves from over 2" at base to about 1" below flower; fine dark green stem - clasping with recurved margins, up to about 1" from flower.

1971 Jan 30th Flowering at Howitt Springs. Stem on specimen when dried straw-color. Leaves alternate without stems.

1971 Oct 10th Flowering in cleared ground near side of lime 1st Road, Rosedale. More robust plant than at Wulgulmerang. Ray florets divided into 4 straps. Achene covered with protrusions that appear ~~4~~ shaped, very close together. Pappus-bristles with hairs + about 25-30 bristles to each pappus. Stem very large up to 4" at base. Flowers singly but plant branched near base and it looked as if new flower buds at top two leaves. From last full leaf to flower about 3".

with ~~long~~ green scales attached completely to stem & then transparent pointed scales. Leaves dark green, smooth on top & recurved edges with pubescent underneath. Involucre. 20 mm long. Flower 5-5 cm across, very deep yellow.

1974 Dec 7th In bud at Tambonitha - Bennison Plains.
1994 Jan 16th Flowering at Mt St Gwinear & Mt. Erica

Podolepis Robusta. - (~~jaemoides~~) Alpine

1967 Feb 6th Flowering at Erica

1968 Jan 18th " " Baw Baw. Big centre with short broad ray florets.

1970 Jan 1st Flowering at Tamboritha Saddle. Large heavy flowers, bright yellow.

Jan 24th Flowering at Wild Dog Creek Wulgulmerang. These plants are robust with large flowers and branched stems. Tall plants - dense heads.

1971 Jan 30 Flowering at Howitt Springs and on Mt Howitt Hike.

1972 Jan 20 Flowering as above

Feb. " at Mt. St. Gwinear

1994 Jan 16 " " " " " " Mt. Erica

1997 Jan 19th " " Mt Nugong.

1999 " 24th " " Cielantipy weekend.

Podolobium

Oxylobium Alpestre

1967 Feb 6th. Flowering at Erica. Pea flower with hairy pods + calyx. Very large standard, stamens protruding through keel. Leaves 3-1½" long 2" wide.

1970 Jan 24th Flowering at Wulgulmerang

Jan 1st " " Tamboritha Saddle. Stamens very noticeable.

Nov 25th Flowering at Briagalong.

1971 Jan 17th " at Mt Useful. In full bloom, shrubs about 3ft high, no more, lovely golden orange pea flowers.

1971 Jan 30th Flowering at Howitt Springs. Recurved leaves, conspicuous midvein. Leaves ending in fine point. Calyx spreading back from flower. Stamens visible. Also flowering on Mt Howitt Hike.

1973 Jan 26th Flowering at Mt Baw Baw

1991 Jan 26th " at Rocky Plains on Wulgulmerang Rd.

1992 Jan 25th " near Buckety Plains.

1994 Jan 16 " at Mt. St. Gwinear & Mt. Erica.

Nov 9th " at Licola weekend

1995 Jan 15th " at Dargo "

1996 " 20th " " Hotham "

1997 " 18th " " Livingstone Ck Track near Omeo.

1999 " 23rd " " Gelantipy weekend. Identified from specimen brought back.

Podolobium ilicifolium
(Oxylobium illicifolium) Prickly Shaggy-pea.

1993 Jan 29th Growing along roadside in Ernundra area behind Cann River up from Camping area at Combienbar.

Plant about 5ft tall. leaves very prickly as leaves are lobed & each lobe has a spine tip. Only about 2 flowers but bright orange. Only recorded for Z in Victoria.

leaves dark green above, pale green beneath veins reticulate between mid vein & strong vein to each lobe tip. Veins yellowish, leaves very shiny. Pods very hairy with persistant style.

2003 June Name [illegible]

Podolobium procumbens

(Oxylobium procumbens) Trailing Oxylobium

1996 Jan 20th Flowering on descent from Paw Paw Plains - Hotham weekend.

1997 " 18th " " Livingstone Ck. Track near Ameo.

2003 June Name change in 1st ed. of Census

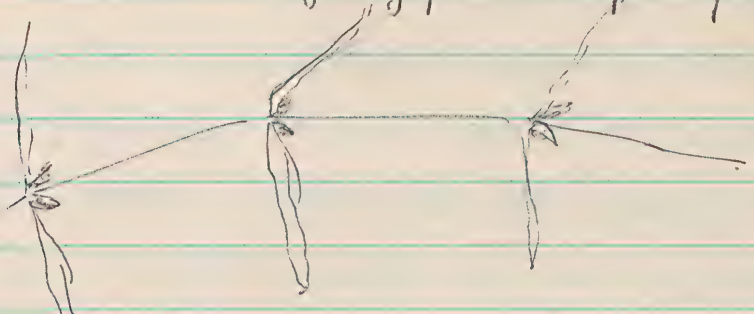
*

Polygonum arenastrum Hogweed.

2000 Apr 11th Growing in Heysfield WetLand.

Polygonum aviculare — Prostrate Knotweed

1991 Apr 13. Plant growing on unmade road near Wilson's property at Willung. Plant lax, jointed and tending to bend at each segment where flowers are. Flowers only very young yet but silvery. Leaves opposite with flowers at each leaf base. Do not know how long flowers will grow. Leaves fall off very easily when rubbed or otherwise pulled. Leaves on our specimen 5cm × .5cm. Large gaps interspacing flowers + leaves.



Feel this specimen is very young.

Polyscias sambucifolia

(Tieghemopanax Sambucifolius) (Elderberry Panax)

1964 April 29th. Green flowers (flattened balls) and greyish white berries with blue spots on same bush at South Cascade.

June 8th Flowering in bush above Dead Horse Gully Both broad leaf variety & narrow leaf variety growing beside each other - several plants of each. Had seen the narrow leaf variety at Parlamurla. but not in flower.

Sept 23rd. This plant was narrow leafed variety. It was about 8 ft high & leaves much narrower. Not in flower.

Dec 31st Flowering opp O. hades.

1968 Feb 9th In bud up T'gon Ck.

Sept 25th Flowering at Cedlindale

1970 Mch 8th Plants on road down to Waratah Bay with exceptionally fine leaves. Although Miss Galbraith identified these some time ago for Mrs Lyndon, she would now like further identication as she feels it may be the other species (T. multifidus)

Nov 25th Plants growing at Briagalong.

1972 Jan 30th " " - headwaters of McAllister River.

1975 Jan. Synonymous Polyscias sambucifolius. Beadle Vothers. Fl. Sydney Region [C. Beauglehole & R. Parsons]

1993 Jan 31 Plants growing in Errinundra N.P.

1995 Jan 15th Recorded for Dargo weekend.

1996 " 20th " " Hotham "

Aug 5th " " Jindivick Landcare area.

1997 Jan 19th " " Mt Nugong.

1998 Jan 25th " " Gelantipy weekend.

1999 " 23rd " " " " . This specimen was P. sambucifolius ssp C. with very fine leaves Specimen brought back.

2004 Apr 3 " " Colley's Rd. Block.

2005 Jan 24th Members brought back specimen from the Errinundra weekend. Identified it as P. sambucifolius subsp 1. Broad-leaf Panax.

Polystichum formosum Broad Shield-fern.

1968 Mch 3rd Tarra Valley Rd. Reserve

Polystichum proliferum Mother Shield-fern

1961	Apr 30	Morwell Nat. Park.
1968	Feb 4	Yerang Park.
	Apr 7th	Cook's Reserve
1969	Mch 29th	Sagasser Rd.
1970	Mch 7th	Waratah Bay.
1968	Mch 3rd	Tarra Valley Rd. Reserve.
1966	June	Bruthern District.
1970	Apr 18th	Glen Nayook.
	Nov 23rd	Lily Ply Gully.
1972	July 16th	Tarra Valley
	" 22nd	Fairy Dell.
1993	Jan 30	~~Errmundra~~ Errinundra.
1995	Apr 12th	Drouin Water Reserve.
	Jan 15th	Dargo weekend.
1996	" 20th	Hotham "
1997	" 18th	Livingstone Ck Track near Omeo.
	Apr 5th	APM Reserve – Grand Ridge Rd.
1999	Jan 23rd	Gelantipy weekend.

Tomaderris

1972 Oct 8th Flowering in Wirilda. Small tree about 8ft high. Leaves large with wavy edges about 1½" long and about ¾" wide, lanceolate to a point, with long stems. Woolly underneath with also short straight hairs — whitish. Midrib, veins, stems + branches very hairy + rusty colour. Flowers in large clusters, bright yellow. Petals on stems + style divided into 2 or 3 (hard to tell but I think 3). Tops of divisions quite straight. Pretty plant.

Pomaderris Angustifolia

1970 Oct 17th Flowering at Briagalong. Identified by Mr. Cane. leaves very small 1½ cm long by app 3mm wide. Many leaves on branches Flowers terminal on seeondary little branchlets

branch / seeondary branchlet
branchlet

Flowers very dainty and small. Pale cream in color + leaves amongst the flowers. Flower stalk very short.
Flowers with no petals, ovary very prominent green + glabrous. Sepals just spreading not turning back at all. Style cleft to base and curling over. Stamens small shorter than style in these specimens and loose at apex. Back of calyx small white hairs, also stalk. Upper surface of leaf covered with stellate hairs, grooved by midvein, undersurface densely covered with simple hairs. leaves elongated but round at each end, only midrib visible.
Branches hairy.

1973 March 17 Plants growing near Lake Talli Khan.
1994 Nov 9th " " in Licola area.
1998 Muelleria 10 - 1997 P. 28 This species belongs to Pomaderris sect. Psilogyne.

Pomaderris (Apetala) Aspera (Common Hazel.

1966 25 Sept Flowering at Stony Creek
1967 29th ~~Sept~~ Aug " " " "
Nov 5th " " " "

Big leaves, wrinkled above, rough to touch, felted beneath, small flowers in large terminal clusters. Stems very hairy.

Dec 29th Flowering Erica Rd.
1968 Oct 13th " at Cowwarr.
1969 Oct 24th " " " This flower is a delicate cream color and looks very dainty in full bloom.
Dec 15th Flowering along Jeeralang Rd.
1970 Nov 23 " at Silly-Pilly Gully
1971 Jan 19th " along the road to Mt Useful.
1972 July 22nd Plant growing in Fairy Dell.
1993 Jan 31 Flowering in Errinundra N.P.
1994 Oct 2 Beginning to flower along Freestone Ck Road.
1995 Jan 15th Recorded for Bargo weekend.
1997 " 18th " " Livingstone Ck Track near Omeo,
Apr 5th Growing in APM Reserve - Grand Ridge Rd.
2002 Nov 23rd Ken Harris showed us plants in Holey Plains State Park on Merriman's Creek that did not look like P. aspera as they were compact, wide, not very high ± 9ft, bushes with small leaves. When keyed out they came to P. aspera, as Ken has never seen P. aspera anywhere in the park although it is recorded for the park, we assumed these plants were the record. It was in seed but Ken had pressed specimens of the flowers.

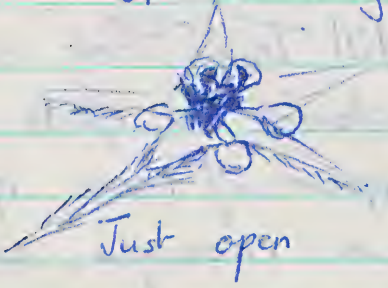
P. aurea (aff. velutina) April 1969 Mueller ica
Pomaderris ~~multiflora~~ P. humilis (oval)

1969 Sept 13th Flowering along track to Holey H.ll, Rosedale. Leaves small about ¼" long & very wide - oval shaped. No brown color. Flowers very bright yellow. Most plants only about 1 ft high but very sprawling. However some plants are as high as 3ft to 3ft 6"; these plants were mostly on the outskirts of the area of this plant. Does this mean these plants missed the bulldozing, one plant almost 4ft growing on edge of clump of trees. Is the plant a very slow growing plant or does it grow taller in shady places.

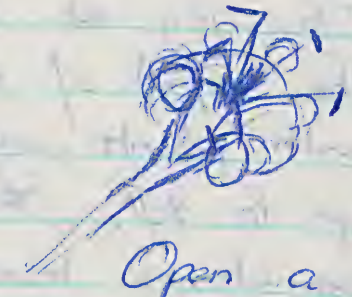
1970 Aug 23rd Plants in bud.

1971 Oct 10th Flowering at Holey Hill Trig Point area. The extent of these plants is quite extensive with plants with support of trees quite high up to 4ft. Flowers in racemes with sometimes leaves at base of main stalk. The whole effect is quite leafy. The flowers are very bright yellow with prominent stamens giving very delicate effect when first flowering. Flowers tend to go brown with age and stamens nolonger visible or at least prominent. Flowers consist of 5 sepals - yellow - with hairy backs to sepals. Sepals are O shape and when open give flower a starlike appearance. Buds are of course very hairy. Stems to individual flowers hairy yellow.
When bud is opened the petals are hooded over the stamens but as flower opens they

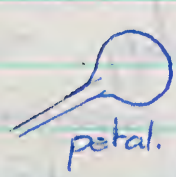
turn back to the sepals. Petals are spoon-shaped with long strap like bases. Petals are alternate with the sepals and both roll back as flower opens. Petals are sparsely toothed or lobed with rounded apex. Stamens have long "stems" with flat elongated "tops" attached with "hinge" a little before "top". These "tops" turn at right angles to "stems". "Stems + tops" appear to be free from hairs though upper surface of "top" may be a little irregular or pitted.
Stigma is thick covered with short hairs and divided in three. Base of stigma rises from dense clump of hairs. Stigma not as high as stamens.



Just open

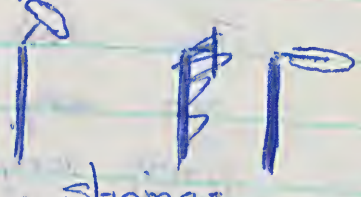


Open a while.



petal.

stigma



stigmas

Main stems of flowers greyish and densely covered with hairs.
leaves up to 2" long back whitish & veins very prominent whole densely covered with white hairs. Upper surface green covered with tiny white hairs giving surface a dull appearance. leaf stem brown covered with long white hairs. leaves alternate.
Ovary very difficult to see, but long hairs. Is lasting quite well in water. All branches hairy.

(humilis) aurea.

Pomaderris (aff velutina) (contr)

1971 Oct 10th Flowering at Holey Hill's
Mr Beauglehole says is P. lanigera.

1974 ~~Sept~~ 10th Plants flowering in profusion. Plant keys out to P. lanigera except that leaves seem constantly smaller than description and backs of leaves + flowers have very ~~little~~ few rusty-coloured hairs. P. lanigera is not reported for this area nor is the soil similar to its usual habitat. Apparently another mystery for this Rosedale area.

1988 Plants badly affected by something and appeared to be dead. Still leaves gone.

1989 May 7 Plant regenerating but about 80% of plants under 1ft high. A few plants showing regrowth on old branches but most regrowth from the roots area. Many plants that looked like new plants altogether, and probably seedlings. Have no idea what caused leaves to disappear from branches. This year has been a wet late summer + autumn. We do not think it could be die back as the banksias were not affected. Some plants with buds.

1994 Oct 2 Flowering along Freestone Ck Road near Froames Rd past Briagalong. These plants appeared different from the Holey Plains plants as they were mostly over 4 ft high + some up to 8ft high. Flowers were much more open panicle in both width + breadth. The longer ~~leaves~~ hairs on stems + leaves appeared more rusty coloured. However they are not diagnostic features but rather matters of degree.

The structure of the flowers + the colour appeared the same. The plants we found only occurred in areas where the soil had been disturbed; i.e. along the roadsides or where a bulldozer had scraped a track through the bush.

1995 Oct 29th Plants on Treestone Creek Road, etc had finished flowering.

2003 June Name change in 7th ed. of Census.

Pomaderris aurea. Page 2.

1970 Nov 25 A rather hairy plant but not too rusty in color. Nf at Briagalong.

Pomaderris costata

1974 Spring. Flowering in the Mullungdung Forest. Plant growing near dam where we got bogged. Cant key it out to anything else although this is a rare East Gippsland plant if we are right. Miss Galbraith to take to Herbarium for identification. North-South Road.

Pomaderris discolor or affinis

1974 Sept Flowering on Kangaroo Swamp Road. Plant keys out to affinis but is not exact. Mr Willis says it is P. discolor. This checks out exactly if you miss the glabbrous leaves as our plant has row of tiny hairs each side of the midrib. Have put it under this heading as feel sure Mr Willis would not give identification if he wasn't sure. Herbarium have it under P. affinis. Rare East Gippsland plant. Think P. affinis plant may be one on Hurrups Hway. Kangaroo Swamp Road v North South Road plants identified by D.G. McGillivray N.S.W. Herbarium as P. discolor but not absolutely sure.

30-5-88 Sent specimens to Neville Walsh at Herbarium. He is reviewing Pomaderris genera.

Pomaderris elachophylla. hacy P.

1971 Jan 17th Plants growing at Springs near Mt Useful. Plant with very rusty hairy branches. Leaves shining above but velvety below. Leaves small - less than an inch. Flowers very small.

1973 June 23rd Plants growing at Parlamurla near Big Tree. Plants in bud with app. 4 or 5 flowers to a cluster (very small buds). Buds quite hairy. Leaves opposite - tiny - not more than 6 mm long & 2-3 mm wide oval shaped with main vein very prominent on back. Upper surface dark green with single hairs. Under-surface covered with white tomentum & then with conspicuous stellate hairs especially on mid-vein. Branches covered with brown tomentum & stellate hairs. Whole effect of tree very hacy.

1981 Nov 5th Flowering in Reserve Gully at Yallourn. Flowers form a ring right around the branch and appearing rather singly than clustered. Effect very fine and leaves almost hidden.

1997 May 17th Plants growing in gully in bushland off Bill Schultz Drive in former S.E.C. land. It was in first gully from gate - a number of plants.

Pomaderris Elliptica (Oval)

1966 25 Sept Flowering Near Stony Creek

1974 Spring One plot of plants on Chessum Rd just after we turn the corner near Pultenaea pedunculata. Mr Willis identified

1993 July In Census 4th edition 1993 Pomaderris multiflora was included with this species

1998 Muelleria 10-1997 has key for 2 varieties of this species p. 52 but var diemenica is endemic to Tasmania. & var elliptica is from NSW to Tasmania. Only P. elliptica is mentioned in Census 5th Edition

Pomaderris ferruginea. (Rusty)

1969 Nov 5th Flowering at Stoney Creek. Ovate leaves shiny, dark green above deeply veined but smooth to touch, woolly grey + rusty veins beneath. New shoots very rusty color. Flowers on end of side branches not much smaller than Hazel P. Hairs on stem also rusty color.

1969 May 20th Commencing to come into bud. Only doubt on this specimen is that upper surface of leaves have hairs - very short but visible with the naked eye. Leaves almost circular 2 cm by 1.5 cm at base but higher up 1 cm by .8 cm. Leaves outlined with white hairs. Branches brown or rusty color due to hairs. Leaves alternate. Flower stalks twice as long as leaf stalks. + coming from same point on stem. (Miss Galbraith's Book says Woolly Pomaderris - lanigera - is only in the E.)

1969 Nov 29th Flowering at Providence Ponds. Identified by Miss Galbraith as ferruginea because of the pattern of the veins. To be affinis the veins had to be branched or netted at edge of leaves. These just divided from main vein + went straight to edge of leaf. I think this identification was taken from back of leaf.

1969 Oct 4th Flowering along Licola Road

1994 Oct 2nd Plants growing on Freestone Ck Rd up near Froames Road. Identified by James Turner

Pomaderris Helianthemifolia

1990 Oct 17th Flowering at Briagalong. Identified by Miss Galbraith & Mr Cane.
Leaves elongated & round at each end app. 2.5 – 3 cm long 8 mm wide on very short stems. Many leaves on branches.
Upper surface of leaf dull but glabrous
Under surface velvety with fine white hairs
Midrib & side veins visible on back of leaf.
Midrib not as deeply grooved as some.
Flowers at leaf bases in clusters on stalks about 5 mm long. Flowers with no petals, ovary very prominent & glabrous.
Stamens on long 'stems' & spreading,
Style cleft but not right to base.
Stamens at right angles to 'stem'
Sepals curling back and covered with short white hairs (not too densely). Flower stem also covered with hairs.
Branches glaberous.

1998 In Muelleria Vol. 10 1997 Walsh & Coates have 3 subsp of this species. subsp. hispida in East Gippsland & Eastern Highlands. subsp. (II) minor endemic to Victoria in NE & perhaps central parts of State; and subsp. (III) helianthemifolia. leaves on subsp (III) are glabrous on upper surfaces & other two hispid; subsp (I) leaves 10-45 mm; disc glabrous and subsp. (II) leaves 5-9(-13) mm. long & disc hispid.

Pomaderris intermedia (syn sieberi)

1995 Oct 28th Recorded on Mt Heddrick. Identified firstly by James Turner.

Pomaderris lanigera

1973 Oct 28th Plant growing in Avon Country.

~~1995 Oct 28~~ " " on V

1998 Sept 19 Flowering along Peterson's Lookout Track.

Pomaderris oraria. Coast Pomaderris

1978 Sept 23rd Plant growing in heathlands near Bear Gully (near Cape hiptrap). leaves small app. 15mm long x 12mm wide; deeply veined on upper surface and brown on lower surface. Hairs on upper surface single hairs and stellate hairs - on under surface hairs mainly stellate giving leaf whitish appearance. White margin around leaves. Buds covered with brown stellate hairs. Flower cluster on ¼" stalk at this stage. Flower clusters from leaf bases.

1996 Oct 12th Flowering at Paradise Beach past 2nd pipeline in N.P.

1999 Oct. 4 " " " " " " " " "

1990 In Muelleria Vol 7/2 1990 article on P. oraria complex with key to taxa & descriptions & diagrams of 7 species or ssp.

Pomaderris Pauciflora.

1970 Oct 17th Flowering at Briagalong.

leaf 2.5 cm ± 1 cm wide mostly considerably smaller. Midrib + side veins visible on upper surface. Leaf-stem app. ⅓ length of leaf or less not more. Leaf with sparse straight white hairs including on midrib — midrib hairs may be stellate but difficult to say. Dark green + wrinkled above. Below densely covered with white, rusty curly hairs. but with rust appearance to naked eye. Margin of leaf recurved.

Flowers no petals, Stamens large at right angles to stems, Ovary with long white brown hairs as high as style; Style cleft Calyx with sparse long white hairs + sepals not opening ~~sometimes~~ very wide. Ovary visible easily under microscope. Sepals never curling right back. Branches short white hairs. giving greyish appearance.

Much branched plant. Flowers terminal on side branchlets and sometimes from leaf bases. Branchlets quite leafy. Identified by Miss Galbraith

Pomaderris phylicifolia — Narrow-leaf Pomaderris

1992 Jan 30" Flowering at Mt Hairutt. near the waterfall on the plains. Bush with small narrow recurved leaves about ½" long & recurved halfway across leaf. heaves pointed upwards and quite dense. Flowers in short raceme amongst the leaves - calyx conspicuous.

Branches woody brown very hairy. Stamens and anthers quite conspicuous. Outside of calyx very hairy too.

1992 Jan 25" Flowering on way to Buckely Plains. heaves of this specimen so revolute that only midrib visible.

1995 Illawarra 10 - 1997 has 2 varieties of above species p.53 Key to P. phylicifolia ssp. phylicifolia & ssp ericoides record both varieties with ssp ericoides restricted to montane or subalpine areas. Both varies. are known to grow together in Wulgulmerang area. Suspect above recordings may both be ssp ericoides but cannot be sure.

Crook Creek by 3 Km NW
of Holey Hill
Track — straight east of N
from Chessum Road
3 Km along pine plantation

Mullungdung.

200m west track takes off.
300/400 along track across
crook creek

Pomaderris pilifera
Petals on long "stems" earshaped joined at top
to be hooded. Leaves glabrous above with very
minute hairs on midrib. Leaves beneath
whitish with stellate hairs long brown hairs on
midrib + secondary veins. Margin recurved at 90°
Flower style ~~cle~~ cleft into three - about 1/3 way
down, sepals pointed hairy on back
Tuft of hairs of base style - ovary inferior
Stagmens 5 elongated jointed to filament in middle

Pom. Pilifera
Petals not auriculate, style deeply cleft.
Leaves usually blunt at each end, upper surface minutely stellate-pubescent along the midvein the margins hardly recurved.
1957 Calyx tubular leaves 4 cm

Pom. Vellutina Vic Pat 58-176 Mch 1942.
Foliage pale + vellutinate on both surfaces each leaf broadly elliptical, obtuse - rarely exceeds an inch. Inflorescence identical with P. phillyreoides ~~but this species has~~. Foliage sparse Petals present ~~Leaves~~

Pom. Runifolius near Jun. Ins.
Jul 306
Petals absent. Leaf margin not or on slightly recurved. Undersurface of leaves with stellate hairs only
Leaves mostly 2-4 cm ovate to oblong wrinkled + often scabrous above, densely stellate tomentose + whitish or rusty below.
Flowers numerous in small compact cymose terminal panicles.

Pom. angustifolia

upper-surfaces of leaves bearing stellate hairs

Pom. Helianthemifolia

upper-surfaces of leaves glabrous or ~~bear~~ bearing simple hairs

Both above have flowers in leafy thyrsoid panicle, the ovaries prominent and glabrous, capsules glabrous - quite exserted style cleft to base

Pomaderris Pilifera

1970 Oct 17th Flowering at Briagalong. Identified by Mr Cane. Distinguishing feature hairs along the mid vein. Flowers rather loose and ~~pale~~ deep yellow. Style deeply cleft + stamens ribbed + almost at right angle to ~~stem~~ stem. Ovary not visible without removing petals but then finely hairy as are back of ~~petals~~ calyx. Leaves blunt at apex + sometimes just as blunt at stalk end. Leaf on stalk quite long app. ⅓ length of leaf. Petals almost circular + much shorter than the stamens. Under-surface of leaves leaf-stalks + branches all covered with velvety hairs, short, white. Flower stems or branchlets rather erect. ~~Calyx~~ Sepals turned right back almost to stem.

Pomaderris Prunifolia

1970 Oct 19th In bud at Briagalong. Identified by Miss Galbraith. Young growth densely covered with rust colored rushed hairs, giving plant very brown look. Leaves dark green above with prominent veins, pimply or wrinkled with occasional hairs, beneath densely stellate whitish short hairs except on veins where rusty colored. Beagle says flowers have no petals.

1994 Oct 2nd Plants mostly in bud but a few flowers open. Using Willis's key the upper surfaces of leaves are glabrous but the hairs on the matted under-surface stellate. Petals absent and young growth ferruginous. Calyx hairs simple + silky + long. As flowers are just opening, it is not possible to know if calyx lobes are finally deciduous. Inflorescence loose no more than 8 cm from lowest flowers to top flowers. Cannot find any bracts in inflorescence. Ovary inferior. Leaves up to 6 cm long + 2 cm wide, petiole 1 cm long. There is another route to P. prunifolius in Willis starting with upper surface of leaves pubescent with velvety indumentum, but otherwise again this plant keys out to above. Briagalong.

1994 Nov 7 Flowering during Nicola Weekend.

NO.

Theme Date

P racemosa.

Upper surfaces of leaves sprinkled with fine stellate hairs, undersurface greenish, calyx lobes deciduous

Black - Flora of S.A.

Leaves ovate orbicular or ovate-oblong 6-25mm long, entire or obscurely toothed, glabrous or almost so above, stellate-tomentose below. Style divided to middle.

Blackall & Lieve Flora of VIC.

Flowers without petals.

Leaves ovate to obovate 1.5-2.5 cm, undersides of leaves & calyx woolly tomentose.

P. elliptica Alessum Road

P. aurea was P. humilis

P. racemosa Chessun / Lime Pit Ld.

Flora of Vic.

Leaves ovate to broadly elliptic mostly 15-20 mm long 8-12 mm wide obtuse rarely emarginate (^), margins usually sinuate-dentate (wavy or undulate), upper surface glabrous or sparsely simple- or stellate-hispid, lower surface densely stellate-pubescent, lateral veins usually conspicuous.

Willis says hairs stellate only.
Leaves small rarely 3 cm long always less than 2 cm broad) Calyx lobes ~~persisting~~ deciduous leaves usually 1—1.5 cm long.
& upper surface glabrous
or Upper surface ± pubescent, under surface predominately stellate.
Either leaves > 5 cm long or the flowers with pubescent ovaries.
Leaves broad small to medium, rare > 4 cm long & always < 2 cm wides
Leaves 1-4 cm, Calyx tube hoary with stellate hairs only, leaves rarely attaining 3 cm.

Name Pomaderris No.

Date

P. racemosa

Leaves not more than 3.5 times as long as wide. Often under than 15 mm. 12

12 Only stellate hairs 13.

12 Sepals deciduous, ovary half-inferior, leaves to 30 mm long.

P. racemosa

13. Leaf margins crenate, minutely serrate or dentate, flowers always apetalous 14

13 Leaf margins entire, flowers with or without petals 19.

14 (second) Sepals persisting in fruit, ovary inferior or if ever half inferior then leaves longer than 30 mm. 15

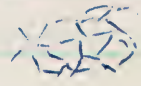
Pomaderris Racemosa. Cluster

1970 Oct 1. Plant growing in new area at Rosedale. Leaves under 1" long, dark above and light woolly below. Under microscope hairs underneath are in clumps spreading like stars. Leaves oval and only lightly wrinkled above. Flowers appear to be in racemons at terminal of branch but also at leaf bases. Plant only in bud and about 5ft at least high. Rather dainty looking. Buds are covered with same 'stars' of hairs as on the back of the leaves

1997 May 17" Plants growing in gully in Bushland off Bill Schultz Drive in former S.E.C. land. Growing in first gully from gate.

2001 Dec 1 Growing in Sandy Ck bush, Newborough.

Pomaderris vaccinifolia

1972 Oct 8 Flowering in Wirilda. Shrub of about 10ft high. Flowers loose pale yellow or cream. Whole plant with lacy appearance. leaves small about ½" long and about ¼" wide, oval shaped with stems about ⅛" long. Flowers on ends of small branches. Hairs on leaves calyx & disc spreading and joined. 
Flowers without petals, style divided.
Identified by Miss Galbraith.

1973 Aug 11th Plant in bud in Boola Boola forest. Leaves rather large for this species 4cm by 2cm but Willis says they can be this size though it is not usual.

1997 Sept 19th Plant in bud in Boola Boola forest at W6.

Pomaderris Veltutina

1930 Dec 17th Flowering at Briagalong Identified by Mr Cane. Plant withered very quickly even in water. Leaves mostly less than 1 inch long almost oval rounded at apex light in color probably because of velvety short hairs. leaf-stalks app. ⅓ length of leaf. Both sides of leaves similarly covered with velvety hairs. Flowers:- Sepals turned outwards halfway, petals short. Calyx covered with long white hairs Stamens appeared more folded than ribbed, "stems" appear to twist near stamen. Style does not appear cleft but difficult to see. Ovary also difficult to see but with hairs on it, deep down in calyx.

1933 Mch 17 Q. Near Lake Tali Khan. As above Upper surface of leaves grey-green & under surface whitish. Both side with soft velvety touch. Long silky hairs on young growth Willis says on veins & so must be on lateral veins as well as mid-vein on young leaves but only on mid-vein on older leaves. Only way to keep leaves soft is to immerse completely in water but then hard to see hairs.

1934 Nov 9th Flowering on Licola Weekend.

Poranthera

3538 P. corymbosa N.S.W. - Clustered Por.

Pomax umbellata.

1967 Nov 5th. ~~Dredtop~~ Flowering at Stoney Creek. Very hairy plant leaves in groups of five lobs although not appearing to be joined in anyway. Flowers in umbells, 10 flowers on long stalks. Two hairy bracts same length as umbel, bigger than leaves. Calyx pitcher-shaped with half petals round outside of centre

app. 7 ♀ side view, all very hairy. leaves app. 4 mm long. Flowers appear green with two red dots in centre.

1968 Sept 31st Found in bud. Buds very red and close in amongst leaves. Found on Licola Rd.

1969 Oct 4th Flowering at Coonwarr. Flowers with tubular flowers - maroon.

1970 Oct 11th Flowering at Heyfield

Nov 25th " " Briagalong only few flowers.

1973 July 23rd Plant growing at Toongabbie North.

1991 Oct 12th Plants growing at Mt Hedrick.

1993 Jan 31 Plants in seed in Erringundra N.P.

1994 Nov 9th Recorded for Licola weekend.

1995 Oct 28th " " Mt Heddrick

Poranthera Microphylla

1966 Oct 30th Flowering on Clarks Road. (Like tiny ricelflower)
1967 Feb 19th " at Wolfe's.
Oct 8th " A.P.M. Reserve
1968 Jan 12th " in garden
Oct 27th " Call Sth Rd.
Nov 12th " Clarke's Rd
1969 Feb 16th " Rosedale.
May 10th Plants in bud along Lime-pit Rd. Rosedale.
Sept 13th Flowering at Rosedale
Oct 19th " " Clarke's Rd.
1970 Jan 1st " " Tambaritha Saddle.
24th " " Wulgulmerang
Sept 14th " " Dirsun Downs Road.
Oct 11th " " Heyfield
19th " " Briagalong
1971 Jan 17th " at Springs near Mt Useful.
Jan 30th " at Howitt Springs and on Mt Howitt Hike. Plants more robust and flowers larger though appearing looser.
Oct 10th Flowering in APM reserve
24th " at Reids Corner.
Nov 13th " at Cowwarr
1972 Feb. " at Mt St. Ciwinean.
1994 Nov 26th Growing in APM block Stradbroke Sth. Cypp. Hway.
Oct 28th " " T'gon Sth Reserve - Flowering.
" 30 " " Dawson R'way Reserve "
1995 Jan 15th " on Dargo weekend.
Oct 25th " " Mt Heddrick
Dec 12 " " Railway Reserve near Traralgon
1997 Jan 18th Flowering on Mt Nugong.
1999 " 23rd " " Gelantipy weekend.
2000 Dec 3rd " " Sweetwater Ck. Reserve.

2002 Nov 23rd Growing in Haley Plains State Park.
2004 Apr 3 Plants in bud in Colley's Rd. Block.
2006 Nov 4th Flowering at Springsare area.

Potamogeton crispus — Curley Pondweed.

1981. Dec 29th Plant growing in clam below house at home.

1985 Jan 6th Plants in creek at bridge on Downies lane.

2003 Mar Recorded in Eel Hole Ck/Cemetery Conservation Reserve Management Plan.

Potamogeton ochreatus Blunt Pondweed.

1955 Jan 6th Growing in creek at bridge on Downies lane.

2003 Mch Reported in Eel Hole Ck/Cemetery Conservation Reserve Management Plan.

Potamogeton pectinatus Fennel Pond-weed.

1996 Dec Growing on Old Melb. Rd. near Latrobe Rd. Morwell.

Potamogeton tricarinatus Floating Pondweed.

1996 Nov 7th Growing at Gifford Rifle Range.

Dec " Railway Reservoir Conservation Reserve, Traralgon.

2003 June Name change in 7th ed. of Census into 3 species

Scape 27cm

Leaf 11cm after 9cm emerged with scape 9cm less than scape.

Dorsal Sepal app 4mm accuminate 5mm of broad base.

lateral ~~Sepals~~ Petals 3mm spreading acute whitish.

lateral Sepals 6mm divided right to base and spreading accuminate ~~points~~ points. very green. app 1mm wide

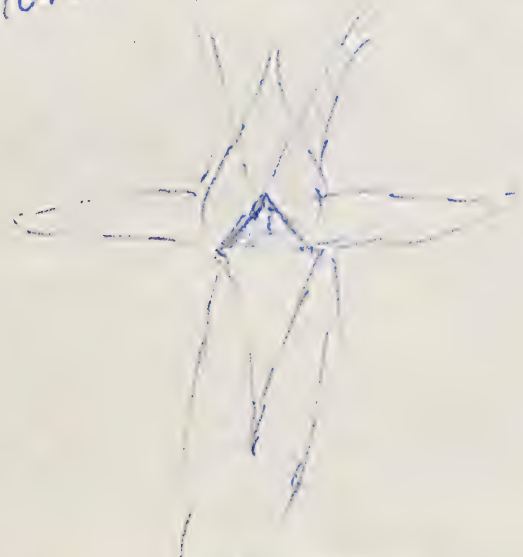
Column widely triangular but not very visible as dorsal sepal bends

labellum pointed not quite point on level with lateral sepals. app 4mm with margins white & crisped. Calosity just past bend and pointed not protruding. Can't see any hairs.

Ovary 4mm on short stalk.

App 15 flowers on scape

Floral bracts tiny covering stalk of ovary.



side angle of labellum.

Prasophyllum from Lost Plain.

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PRASOPHYLLUM - Garnet.

Morrisii, nigricans, archerii, despectans. Tiny flies- browsed on labellum on the lamina, more active as nearer the column and then detirmined penetration into interior, short stay occurred, the fly finally backed out with pollinea adhering to the dorsum of its thorax.

Callus plate of labellum evidently constitute preliminary feeding grounds of visiting insects. Experiment showed that a tiny drop of fluid exuded whenever the plates were stabbed with fine needle and it was also seen that the labella of freshly expanded flowers were literally bedewed with minute drops of glandular exudate arising from the elongated glands on labella.

Hairs on thorax of fly ruptured the membrane covering of the viscid disc of the rostellum. The exuding fluid adheres to the thorax surface and when the fly finally backs out of the flower it carries the pollinarium firmly attached. Fly 2 mm. long.

During short interval between exit and re-entry the causicle to the pollinea attached to the fly functions in a remarkable manner. At first almost erect, it quickly collapses, with the result that the pollen mass is rotated so that it lies almost horizontal in relation to the head and thorax of fly. In this position the pollen is correctly poised for implantation on the stigma of the flowers next visited.

Sp. aff. pyriforme D

Prasophyllum (campestre) Northern Plains leek Orchid

1995 Nov 9. Flowering with Thelymitre epipactoides just over the causeway & along the road to the left at Golden Beach.

~~Scape~~ leaf as tall as flower & very stout.

Scape not sure of height as specimen was not all Scape but ± 7 ins.

Dorsal Sepal. linear-lanceolate but about 3mm at base and 6mm long.

lateral Petals: widely spreading but incurved at tips ~~but incurved at tips~~ very slightly crenulate. about 9mm long.

lateral Sepals: Free linear-lanceolate 9 mm long.

labellum: ± 7mm long, recurved at right angle but recurved part of labellum triangular, margins shallowly folded inwards, callus plate green & almost covering base of labellum & becoming dark & narrowing & increasingly raised with wide groove in middle giving horse-shoe effect. Callous extending well towards apex of labellum.

Column: With 2 brown appendages which are broadest at apex and irregularly toothed at apex. These appendages are quite conspicuous.

The flower has a brown appearance like Prasophyllum alpinum. Although the margin of the labellum was brown in some flowers but had a pinkish tinge in others.

Sent to Dr. Parsons for positive identification.

I am worried as this species is only recorded in the northern plains areas of the State around Albury & Whroo (South of Rushworth).

Rec 3 June Name change in 7th ed of Census

Prasophyllum Australe. (Austral)

1969 Jan. 1st Flowering along Senini's Track below the Lizard Orchid in swampy area near Melleleuca.

Scape 3-4 ft. Specimen 3 ft 19 flowers
Leaf approx 2 ft.
Flower reversed.

Dorsal Sepal: 8 mm. long 4 mm wide at base. Tapering gradually to point. Green with wide brown stripe on back, inside yellowish green ⌣ shape from side view & curved from front.

Lateral Petals: 8mm long. 2 mm wide so much brown as to say color brown with light green margin. Pointing straight forward each side of labellum.

Lateral Sepals: Light green with brown stripe narrow & not dense. 1 cm long + 2.5 mm wide. Both sepals appear united for entire length although one very mature flower had the points separated. Slightly recurved at outside edges.

Column: Very short yellow & brown horizontal stripes wlinged with pinkish wings coming over labellum

Labellum: Most conspicuous part of flower. Pure dense white, approx 8 mm long, Hard to measure because of bend. 4 mm wide, Curved back at 45° or less. Edged so fluted at to give labellum a ⅄-shaped appearance from front. Appears to have groove down centre where both sides meet. Labellum tapering suddenly to point.

From base to bend are two ridges standing at least 1mm high perhaps more rising from ridge : white.

Ovary: 1·2Cm long, thin, grooved, hugging the stem; with floral bract 6mm long same color as ovary - green - & not visible unless looking carefully.

The yellowish green on sepals & petals give the flower the effect of being gold tipped. A really handsome orchid.

1970 Jan 18th Flowering at Seneni's Track. Dad & Max say only three plants with flowers on at this time - 4 plants not as robust as last year. Could this be because of increased growth of tealtree, etc.

Prasophyllum Brevilabra (Short-lipped)

1966 Oct 16th Flowering along Cormandale Rd at gravel pit. or bend.

Nov 13th Still flowering along above rd.

Scape. 44 cm approx. 20" 33 flowers + buds.

Dorsal Sepal:- 8 mm - pointed and lanceolate - in lower position of flower. Light olive green ()

Lateral Petals:- horizontal 5 mm. Incurved at tip, margins white, middle mauve.

" Sepals:- Entire throughout. 8mm, same color as dorsal sepal. Combined sepals same shape only broader - in upper position on flower.

labellum:- White, sharply recurved to touch itself at base of lateral sepals. Margins fluted. Cali continuing just past bend. Back of labellum deep mauve stripe.

Column:- Densely covered with pale yellow cali, broad + flat. Line of maroon at top. Maroon wings from line. Stigma below column, boat shaped shorter than column.

Each flower has tiny stem + ovary elongated 7 mm long 3mm wide

leaf:- 19 cm - a little less than ½ the scape. Flower stalk comes from middle of leaf. Therefore leaf stem clasping.

1967 Oct 8th Flowering along Calignee 8th Rd near Lurze's Hakia.

22nd Particular flower with deep purplish tints.

1969 Oct 13th Flowering at Tyrong North.

1972 Jan 30th " " Mr Hewitt

Prasophyllum correctum.

2004 Feb David Jones has article in Muelleria Vol 18 2003 which gives key to P. correctum group
One species P. bagoensis grows in S.E. N.S.W.
P. correctum is recorded for Munro & Hinderwood Sth.
P. cerebriflorum is " " northern Tasmania
& P. incorrectum " " " Campbell Town ".

Prasophyllum elatum.

1969 Sept 4th Found flowering near rubbish Tip at the Town. The one in bloom had very black flower stems & flowers but another one nearby was a yellowish green. However this latter one was not fully developed. Many smaller leaves around & a few not so robust plants.

Scape: 70 cm high 54 flowers. almost purplish black.

Leaf: 56 cm broken open to allow flower to emerge about 22 cm from Typ but closed again towards typ.

Dorsal Sepal: 8 to 10 mm, slightly hooded lighter than stem. 5 mm wide. Inside of sepal light grey & lined with purplish black.

Lateral Petals: 8 to 10 mm slightly curved but not extending over labellum, edged with white - 2.5 mm wide.

Lateral Sepals: 12 to 14 mm joined right to top, slightly curved back.

Labellum: 2 mm shorter than lateral sepals - green - margin white & very fluted - centre green with two ridges forming Λ some distance in from margin all along. Area between ridge & margin lined. Think there are lateral lobes to labellum - though they could be lateral lobes of column - they were white almost clear - curved round like lateral petals

Column: Hooded with disc in front but also a ring on top. Below disk dark oval area with two wings hugging the

column
whole effect is something similar to an insect.
Ovary - Close to stem 8 mm - dark - leaf bract cover
ovary - grooved.
Insect was working on flowers. He was quite oblivious
the fact that we were there & spent much time
the flowers. We looked in one flower after it had
left & found a pollinea on the disc. The insect
had a bright red back but black elsewhere.
He must have been busy on the open flowers
for at least half an hour.

Nov 8th Flowering at Wilson's Prom. along track down
to lighthouse. This flower was a beautiful honey
color. Dorsal Sepal: joined entirely and curved upwards.
lateral Petals - curved out & up.
" Sepals: revolute - wide.
labellum: very close to Dorsal sepal, white
crenulate with green stripe up middle.
hat. lobes white
Flowers very close tog.
leaf - ¾ length of scape.

Oct 12th Flowering on Tyrong North Road. Dark variety.
1994 Nov Oct 22nd Flowering on the burnt area on the Walkerville Road
near the turn-off to Walkerville North Rd. Same area
as lizard Orchids. Both dark & greenish forms.
Dec 26th Ron Court reports orchids still flowering but mostly
the green ones this time.
1995 Oct 12th Flowering on Wonthaggi Heathlands.

Prasophyllum favum

2006 Jan 11th Flowering at Tanjil Bren (Ralph's CD)

Rare & Threatened Species.

When I did the comments on the above list I was about to add Prasophyllum frenchii which had been combined with P. gracile in the 2nd edition of the Census of Vascular Plants of Victoria. However when I checked the 3rd edition I discovered P. gracile was again separated & named P. constrictum. We have never been actually sure if the orchid at Cowwarr was P. gracile or P. frenchii as the plants are very variable re the lateral sepals being connate or free. As both are recorded for grid T it has never been necessary to separate them.

So I sent two specimens, one very sturdy & the other very delicate; one with constricted labellum & one not & several other variations, to Dr Parsons for positive identification. The reason I sent the specimens to Dr Parsons, & not to you was that CFL recinded my permit, to pick scientific specimens after 10 years & suggested I get an agency permit from Dr Parsons. This I did but now I feel all my specimens ~~must~~ should go to Dr. Parsons. Dean Rouse identified both specimens as P. rostratum (not in the census) & referred me to D. Jones Orchid Book. I borrowed a copy locally & am still confused. ~~Dr~~ Dean Rouse says the orchid is not that common but certainly not threatened. I also noticed ~~in~~ D. Jones' ~~book~~ includes ~~that~~ P. frenchii ~~is included~~ in P. rostratum ~~the~~.

~~Now the reason for this letter~~ Sos I think the above orchid specimens are the old P. gracile. they ~~& therefore~~ do not need to be added to your information. However it has been reported to me that the old P. hartii - now P. frenchii from Census - is growing at the airfield at Yarram near the helicopter pad. If you do not have this information & need the orchid positively identified it then I would suggest you to contact Sue Taylor DCE Yarram who knows where the orchid is growing & is trying to preserve the area. Sorry not to be more definite

Yours faithfully

R.F.PARSONS
Botany Department
LaTrobe University
3083 Australia

29/11/90

Dear Bon,

The easy part first — Cliff's lists ~~have~~ have Barbarea verna on them but ~~have~~ give no records — so we would very greatly appreciate a specimen & a grid card for it.

Now the nightmare — I've spoken to Jim Ross at MEL at length but the material is away on loan & so he cannot answer your query on Prasophyllum.

We have a very good orchid person here now — Dean Rouse. He can answer your query but only in terms of the names in D. Jones's 1988 Orchid Book (see Census p. ii). Just one of these isn't in the Census & Jim & I can't work out why. (Prasophyllum rostratum). Here's what Dean says:-

a) Your plants are the same species

b) It is a well-known, widely distributed species found across Vic. S. of the Divide. Its not that common, but certainly not threatened.

c) Using the names in Jones's Book, it is called P. rostratum, a species known from SE NSW, Vic, Tas & SA.

d) Using the old Willis system, it would have been called P. gracile.

A New Name for the Australian Orchid *Prasophyllum chasmogamum* R. Bates & D. L. Jones (Orchidaceae)

David L. Jones
Australian National Botanic Gardens, P.O. Box 1777, Canberra, 2601, Australia

ABSTRACT. The name *Prasophyllum correctum* D. L. Jones replaces *P. chasmogamum* R. Bates & D. L. Jones, the latter being based on an incorrect selection of a type.

Prasophyllum chasmogamum R. Bates & D. L. Jones was described from material collected beside the railway line about 6 km west of Bairnsdale, Victoria, Australia (Jones, 1991), but the wrong specimen was inadvertently designated as the type. Collectors familiar with the orchid flora of the railway line west of Bairnsdale have pointed out that the taxon intended to be described did not occur in the locality, whereas two other species of *Prasophyllum*, namely *P. pyriforme* E. Coleman and *P. frenchii* F. Mueller, were present (J. Jeanes, pers. comm.; R. Clark, pers. comm.). A critical examination of the type of *P. chasmogamum* showed it to be identical with material of *P. pyriforme*. Thus *P. chasmogamum* becomes a synonym of *P. pyriforme*, and the overlooked taxon is here described as new.

Prasophyllum pyriforme E. Coleman, Victorian Naturalist 49: 195, t. 14. 1932. TYPE: Australia. Wonga Park, Doncaster, Oct. 1931, *F. Bullock s.n.* (holotype, MEL).

Prasophyllum chasmogamum R. Bates & D. L. Jones in D. L. Jones, Austral. Orchid Res. 2: 77. 1991. TYPE: Australia. About 6 km W of Bairnsdale, beside railway line, 5 Nov. 1969, *T. B. Muir 4765* (holotype, MEL).

Prasophyllum correctum D. L. Jones, sp. nov. TYPE: Australia. Victoria: near Munro, 5 Nov. 1992, *J. Jeanes* (*D. L. Jones 10689*), (holotype, MEL; isotype, CBG). Figure 1.

Prasophyllum fusco R. Brown affinis, sed floribus late aperientibus columna exposita, labello late ovato-lanceolato basi latissimo disciforme, et calli aliquantum irregulariter marginato differt.

Slender terrestrial tuberous herb 15–40 cm tall. Tuberoids ovoid, 6–10 mm across. Leaf 12–30 cm long, dark green, base 3–5 mm across, red to purple, free lamina suberect, often withered at anthesis. Floral bracts ovate, ca. 4 × 2 mm, apiculate. Ovary obovoid, ca. 4 × 2 mm, shiny green, set at ca. 30° to the rhachis. Inflorescence a narrow loose spike 5–10 cm long, consisting of 10–20 flowers. Flowers 7–9 mm across, predominantly yellowish green and light reddish brown, opening widely, fragrant, sessile. Dorsal sepal linear-ovate, 7–9 × ca. 3 mm, green with brown striae, nearly vertical, subacute to acuminate. Lateral sepals linear-lanceolate, 7–9 × 1.5–2 mm, connate throughout, partially united or free from the base, erect or recurved, subacute, anterior margins involute throughout. Petals linear to linear-lanceolate, 7–9 × 1–1.2 mm, green with brown striae, upswept, incurved to widely spreading, subacute. Labellum broadly ovate-lanceolate in outline when flattened, 6–8 × 3.5–4 mm, yellowish green, erect, narrowed to a short basal claw, not gibbous when viewed from the side, proximal half almost orbicular, obliquely erect, flat with entire margins, distal half recurved, with entire or slightly crenulate margins, the apex touching the sepals or protruding through them, apiculate; callus elliptical-lanceolate, 5–6 × 2–2.5 mm, raised, fleshy, green, channeled centrally, margins entire or crenate, narrowed beyond the bend and extending nearly to the labellum apex. Column ca. 3 × 3 mm, porrect from the end of the ovary, exposed by the wide expansion of the tepals; appendages linear-oblong, ca. 2.3 × 0.7 mm, pale green, truncate or emarginate. Anther ovate, ca. 2 × 1.6 mm, dark red brown. Pollinarium ca. 2 mm long; viscidium ovate, ca. 0.25 mm long, white; hamulus ca. 0.2 mm long, ligulate; pollinia linear-clavoid, ca. 1.6 mm long, yellow, sectile. Stigma quadrate, ca. 1.5 × 1.5 mm, the rostellum about as high as the appendages. Capsule obovoid, ca. 5 × 3 mm, shiny green.

Flowering period. October and November.

Distribution and habitat. Apparently endemic in grassland and woodland in southeastern Victoria, Australia, particularly around Bairnsdale, and with an old record from Marlo. The species is now confined to small areas in railway reserves, growing in grassland dominated by *Themeda australis*. Soils are mainly gray-brown clay loams.

Notes. Prasophyllum correctum can be readily distinguished from its congeners, particularly *P. fus-*

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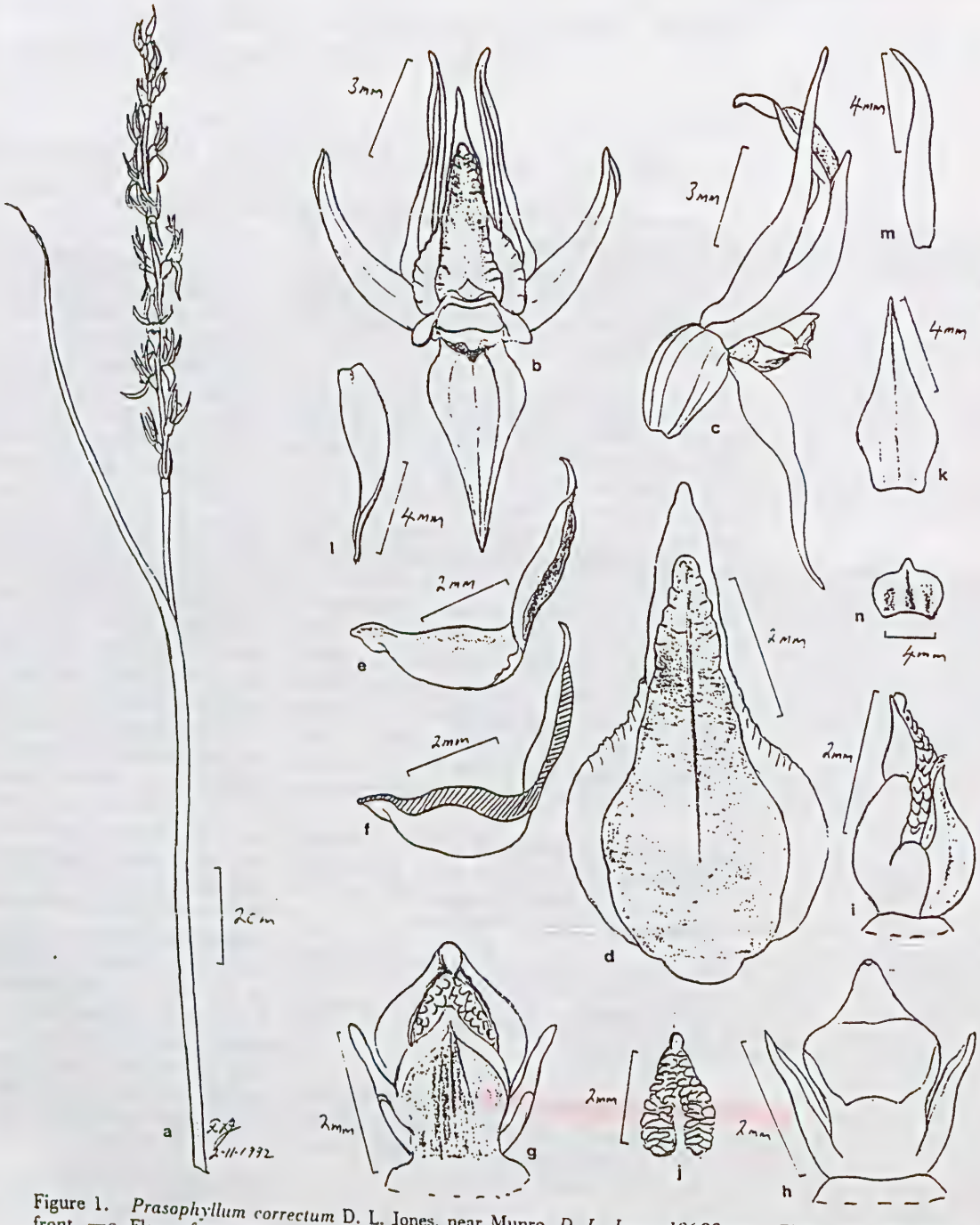

Figure 1. *Prasophyllum correctum* D. L. Jones, near Munro, *D. L. Jones 10689*. —a. Plant. —b. Flower from front. —c. Flower from side. —d. Labellum from above, flattened out. —e. Labellum from side. —f. Longitudinal section of labellum. —g. Column from rear. —h. Column from front. —i. Column from side. —j. Pollinarium. —k. Dorsal sepal. —l. Lateral sepal. —m. Petal. —n. Fertile bract.

cum R. Brown, by its widely opening flowers in which the labellum is nearly erect (and often strongly recurved) and the column is exposed; the broadly ovate-lanceolate labellum with its very broad, disc-like base; and the broad, thick callus with somewhat irregular margins. The species has now been reduced to rarity, with an estimated population of less than 100 plants.

Conservation status. Rare, endangered, and not conserved; suggest 2E by criteria of Briggs & Leigh (1988).

Etymology. From the Latin, "correctus," correct, made right.

Paratypes. All AUSTRALIA. Victoria: ca. 3.2 km E of Munro, 24 Oct. 1987, *R. Bates 11394* (AD); Marlo, (no date), *W. Hunter* (*W. H. Nicholls 625-630*) (MEL); Bairnsdale, Nov. 1930, *T. S. Hart* (*W. H. Nicholls 173, 174*) (MEL); Bairnsdale, 18 Oct. 1938, *W. Hunter* (*W. H. Nicholls 686-690*) (MEL); Bairnsdale, on open grassy plains, Nov. 1941, *W. Hunter* (*W. H. Nicholls 798, 799*) (MEL); Lindenow, on railway line, 18 Oct. 1970, *D. L. Jones s.n.* (MEL).

Acknowledgments. I thank Jeff Jeanes and Ruth Clark for bringing the problems associated with the description of *Prasophyllum chasmogamum* to my attention, Tim Entwisle for discussions, arranging the loan of specimens from MEL, and for reading the manuscript, and Mark Clements for commenting on the manuscript.

Literature Cited

Briggs, J. D. & J. H. Leigh. 1988. Rare or Threatened Australian Plants. Australian National Parks and Wildlife Service, Special Publication No. 14.

Jones, D. L. 1991. New taxa of Australian Orchidaceae. Austral. Orchid Res. 2: 1–208.

RECEIVED
GIPPSLAND AREA OFFICE
19 JUL 1984
ACTION/FILE

Jim & I can't work out why
constrictum is in the Censhs but not in Jones
rostratum " " Jones but not in the Censhs.

In case its of any use I'll put down what Dean told me about the changes from Willis to Jones.

'd gracile is now both pyriforme & rostratum
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old hartii is now frenchii.

The truth of the matter is that lots of changes are being made & that the process is not yet f..ished.

Ive written to Cliff to see if he has a spare py of his updated Grid List photocopy.

All the best

Bob

Do you have access to a copy of Jones Book? Unlike the Census at least it has drawings & descriptions. I'll enclose some photocopies Dean did - probably not all are relevant.

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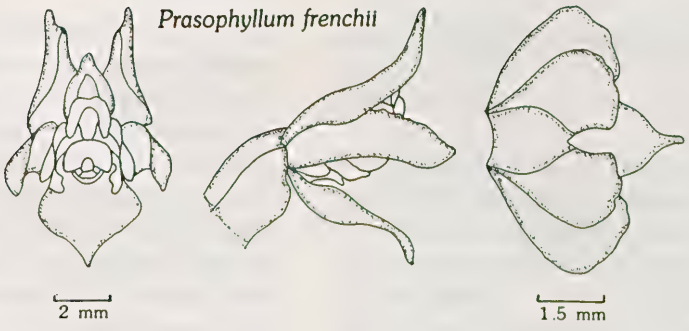
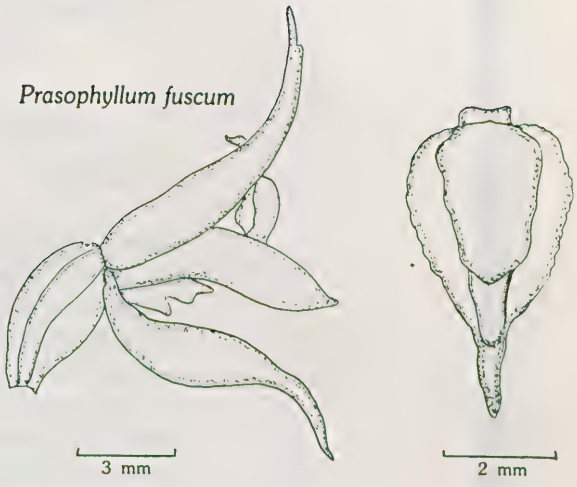
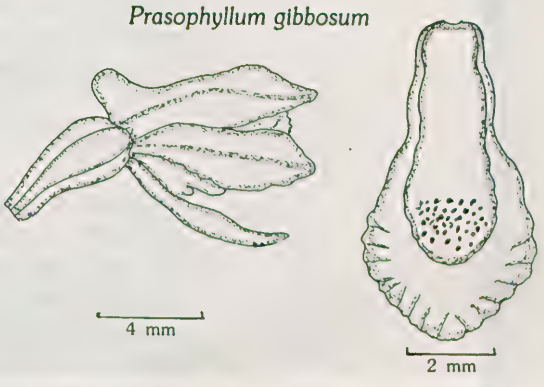




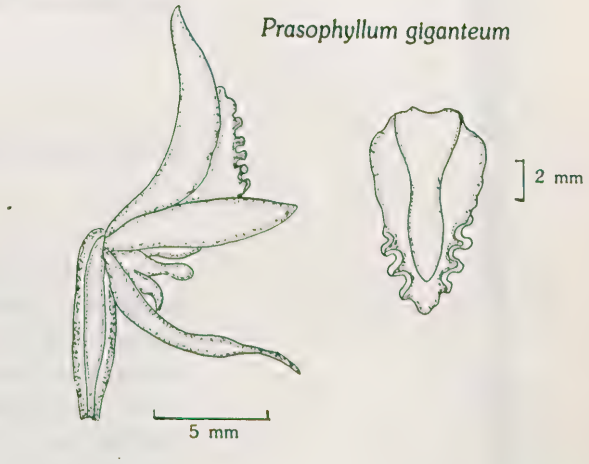
beyond the middle, green with white or cream, wavy, crisped margins. Labellum callus extending about halfway.
Distribution: Qld (south-east), NSW, Vic., Tas.; endemic.
Notes: This species is widely distributed but uncommon. It is a saprophyte which grows in the vicinity of decaying wood and favours high rainfall, hilly districts and often grows amid quite dense undergrowth.
Relationships: A very distinctive species which can be recognised by its much-reduced leaf blade and the yellowish flowers with a gently curved labellum.
Cultivation: Being a saprophyte this species is impossible to grow.

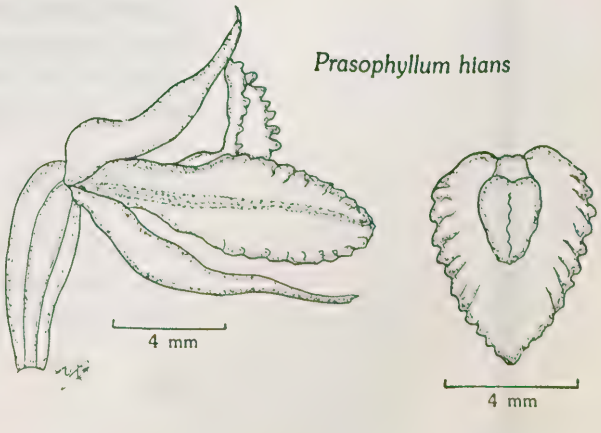


Prasophyllum frenchii F. Muell.

(after Charles French)
Maroon Leek Orchid Oct.–Dec.

Description: Leaf to 60cm long, slender to stout, the free part to 18cm long, often withering at flowering time. Flower stem to 60cm long, bearing thirty to over sixty flowers, in a dense spike to 20cm long. Flowers about 8mm across, green with red suffusions and markings or often wholly dark red, borne on turgid, projecting ovaries. Dorsal sepal to 8mm long, deflexed or decurved, somewhat glandular. Lateral sepals to 10mm long, erect, the tips often reflexed, free, parallel or slightly divergent. Petals to 8mm long, incurved. Labellum to 4mm × 6mm, broadly ovate to elliptical, suddenly recurved near the apex, the margins whitish, crisped. Labellum callus extending just beyond the bend, the surface irregular or even wavy.
Distribution: Vic. (south), SA (south); endemic.
Notes: This species is more or less confined to coastal districts and grows in coastal scrubs and heathlands. Plants are often locally plentiful in loose groups or colonies. Until recently this species was well known as *P. hartii* R. Rogers.
Relationships: *P. frenchii* can be distinguished by its very broad labellum with a short reflexed tip and the callus prominent just beyond the bend.
Cultivation: As for the genus.
Variation: *P. frenchii* is an extremely variable species especially in labellum features such as shape, width and callus details.





Prasophyllum fuscum R. Br.

(brown)
Tailed Leek Orchid — Sept.–Oct.

Description: Leaf to 45cm long, slender to stout, the free part to 15cm long, often withered at flowering time. Flower stem to 45cm long, bearing ten to thirty flowers in a loose to dense spike to 12cm long. Flowers about 7mm across, dark brown to purplish, borne on turgid, projecting ovaries. Dorsal sepal to 8mm long, downcurved. Lateral sepals to 8mm long, united in the basal half or free. Petals to 6mm long, striped, incurved or spreading. Labellum about 6mm × 4mm, abruptly reflexed at right angles either above the middle or close to the tip, the margins flat or wrinkled. Labellum callus raised, extending just past the bend, or to the apex and tail-like.
Distribution: NSW (central coast), Vic. (east), Tas.; endemic.
Notes: This species grows in open forest often among grasses and can be difficult to see. It is also found in coastal scrubs growing on moist, grassy flats and among grass trees. For many years the true identity of this species was unknown and it was confused with another species from inland regions. *P. appendiculatum* Nicholls and *P. urog-lossum* Rupp are synonymous with this species.
Relationships: *P. fuscum* can be recognised by its brownish flowers and the recurved or reflexed, tail-like tip of the labellum.
Cultivation: As for the genus.

Prasophyllum gibbosum R. Br.

(humped)
Hooded Leek Orchid, Humped Leek Orchid — Sept.–Nov.

Description: Leaf to 18cm long, often reddish at the base, the free part about 8cm long, upright. Flower stem to 22cm long, bearing ten to over fifty flowers in a crowded spike to about 6cm long. Flowers about 10mm across, crystalline white or white with bright purple markings, sweetly scented, borne on projecting ovaries. Dorsal sepal to 7mm long, downcurved. Lateral sepals about 6mm long, united for their entire length and forming a hood. Petals to 6mm long, broadest in the upper half, the margins wavy, incurved or spreading. Labellum to 8mm × 3mm, the apex recurved, the margins crisped or wavy. Labellum callus extending about two-thirds of the length, yellowish, the surface covered with small bumps.
Distribution: Endemic to south-western WA (Perth to east of Esperance).
Notes: This species grows on swampy sites and flowers prolifically only after summer fires, although plants on granite outcrops may flower sporadically without the intervention of fires. Vigorous, many-flowered specimens are very attractive. This orchid was previously known as *P. cucullatum* H. G. Reichb.
Relationships: *P. gibbosum* is a very distinctive species which can be recognised immediately by the lateral sepals being joined to form a broad hood over the labellum.
Cultivation: As for the genus.

Prasophyllum giganteum Lindley

(gigantic)
Bronze Leek Orchid — Sept.–Nov.

Description: Leaf to 1m long, stout, usually purplish black, the free part to over 20cm long, erect. Flower stem to 1m long, bearing fifteen to about fifty flowers, in a fairly crowded spike to 40cm long. Flowers about 12mm across, bronze-coloured with fine, dark stripes, fragrant, borne on ovaries closely appressed to the stem. Dorsal sepal to 10mm long, projected forwards or downcurved. Lateral sepals to 12mm long, erect or recurved, united for most of their length. Petals to 10mm long, incurved or spreading. Labellum about 10mm × 5mm, whitish, finely striped, obliquely erect, curved, the margins wavy or crisped (appearing frilly). Labellum callus extending as a narrow, raised, brownish band nearly to the apex.
Distribution: Endemic to south-western WA (Kalbarri to Albany).
Notes: This species grows in swamps and winter-wet depressions in open forest and woodlands. Plants are usually found in colonies and flower only after fires. The flowers exude a strong, sweet fragrance on warm days. *P. grimwadeanum* Nicholls is synonymous with this species.
Relationships: *P. giganteum* is closely related to *P. brownii* but can be distinguished by the bronze-coloured flowers with a distinctly frilly labellum.
Cultivation: As for the genus.

Prasophyllum goldsackii J. Weber & R. Bates

(after Harold Goldsack)
Oct.

Description: Leaf to 30cm long, slender, the free part to 12cm long, erect. Flower stem to 30cm long, bearing five to twelve flowers in a loose spike to 8cm long. Flowers about 5mm across, green and purple or dark maroon, not opening widely, borne on turgid, projecting ovaries. Dorsal sepal to 4mm long, projected forwards, the tip recurved. Lateral sepals to 5mm long, joined in the basal half, becoming free, incurved, green with a central purple stripe. Petals to 3mm long, relatively broad, not spreading widely. Labellum about 4mm × 2mm, obliquely erect, curved sigmoidally, the tip reflexed. Labellum callus extending three-quarters of way to apex, thickened, ending in two prominent ridges.
Distribution: Endemic to SA (Eyre and Yorke Peninsulas).
Notes: This recently described species (1978) grows in scrubby forest over limestone. The flowers open tardily only in hot weather and in cool seasons may not open at all.

Relationships: *P. goldsackii* is a distinctive species which can be recognised by its semiclosed or closed flowers, the broad petals and the labellum callus which ends in two ridges.
Cultivation: As for the genus.

Prasophyllum gracile R. Rogers

This name was applied for years to the species from south-eastern Australia that is now known as *P. rostratum*. The name, applied in 1909, is illegitimate since the same specific epithet was applied to a western species of *Prasophyllum* by John Lindley in 1840.

Prasophyllum grimwadeanum Nicholls

This species was described by Nicholls in 1948 from material he collected at Middleton Beach, Albany. At the time he stated that it was closest to *P. ellipticum* but, in fact, it is synonymous with *P. giganteum*. The latter species was described by Lindley in 1840.

Prasophyllum hartii R. Rogers

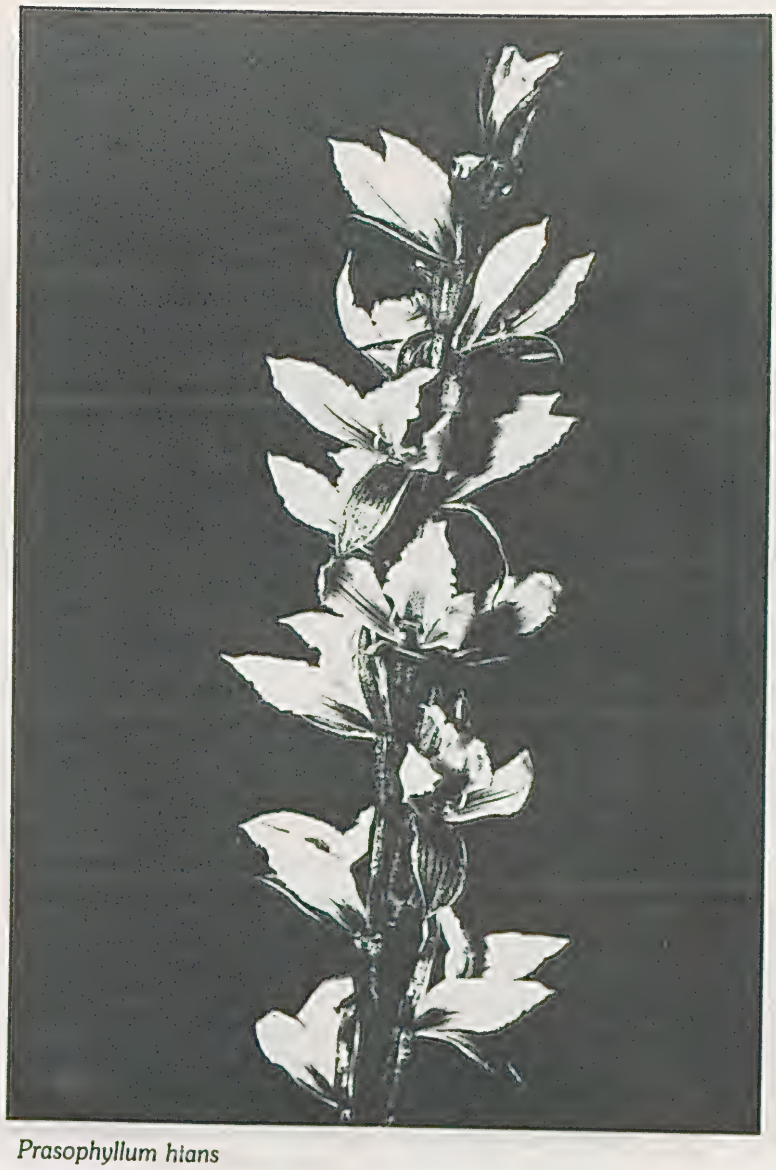
This well-known name became a synonym of *P. frenchii* F. Muell. following an examination of the type specimens. *P. hartii* was described by Rogers in 1927 following collection of material by T. S. Hart. At the time Rogers was unaware that Mueller had described the same species as *P. frenchii* in 1889.

Prasophyllum hians H. G. Reichb.

(gaping open)
Yawning Leek Orchid Sept.–Nov.

Description: Leaf to 35cm long, slender, green, reddish brown or purplish, the free part to 15cm long, erect. Flower stem to 60cm long, bearing twenty to fifty flowers, in a slender, dense spike to 20cm long. Flowers about 8mm across, reddish brown to purple and white, borne on erect, slightly projecting ovaries. Dorsal sepal to 10mm long, fairly narrow, spreading or decurved. Lateral sepals to 8mm long, obliquely erect, humped at the base, united for most of their length. Petals to 10mm long, very broad, white (often striped), crisped, incurved. Labellum to 6mm × 4mm, broadly ovate, sharply recurved near the middle, crystalline white, the margins strongly crisped and wavy. Labellum callus extending to the bend, ending in two raised bumps.
Distribution: Endemic to south-western WA (north of Perth to east of Albany).
Notes: This species occurs on forested ridges and on the coastal plain. It grows both on well-drained sites and in depressions and swamps. Plants flower only after summer fires and may be locally common.

Opposite
Prasophyllum giganteum



Prasophyllum hians

Relationships: *P. hians* is distinctive by virtue of its very slender habit and the very broad, wavy petals which resemble the labellum.
Cultivation: As for the genus.

Prasophyllum lindleyanum H. G. Reichb.

(after John Lindley)
Green Leek Orchid Sept.–Jan.
SEE PAGE 247

Description: Leaf to 35cm long, slender, usually yellowish green, the free part to 15cm long, usually withered at flowering time. Flower stem to 35cm long, bearing twelve to fifty flowers in a loose, slender spike to 18cm long. Flowers about 7mm across, yellowish green, highly fragrant, borne on turgid, projecting ovaries. Dorsal sepal to 7mm long, deflexed or decurved. Lateral sepals to 8mm long, obliquely erect or recurved, free, divergent, the margins inrolled. Petals to 5mm long, white or pinkish. Labellum about 7mm × 4mm, projected forwards, humped at the base and with a second flexure near the middle, white or pink, the margins intensely crisped and hairy. Labellum callus extending above the flexure as a narrow, green band, shortly hairy.
Distribution: Endemic to Vic. and Tas.
Notes: This species grows in open forest, coastal scrubs

sepals. It is also close to *P. pruinosum* but can be distinguished by its white, scentless flowers and a larger labellum callus.
Cultivation: As for the genus.
Variation: *P. patens* is a poorly studied and variable species. There is a large degree of variation in flower size, congestion on the spike, labellum flexure, divergence of the lateral sepals, petal width and waviness of the margins. In some areas, flowering can occur over a couple of months and there seems to be a series of slightly varying races.

Prasophyllum pruinosum R. Rogers
(covered with powdery bloom)
Oct.–Nov.

Description: Leaf to 25cm long, slender, the free part to 10cm long, erect, often withered at flowering time. Flower stem to 30cm long, bearing from eight to twenty-five flowers, fairly crowded in a slender spike. Flowers about 12mm across, greenish or brownish with a greenish or purplish labellum, fragrant. Dorsal sepal to 7mm long, deflexed. Lateral sepals to 8mm long, free and remaining parallel or slightly divergent. Petals to 8mm long, pinkish, widely spreading. Labellum to 8mm × 3mm, recurved at about 60–90°, greenish yellow to light purple, the margins slightly wavy. Labellum callus greenish, extending halfway from the bend to the apex.
Distribution: Endemic to SA (southern Lofty Ranges).
Notes: This rare species grows in sandy or gravelly soils in open forest. It is included by some authorities as a variety of *P. patens* (*P. patens* var. *pruinosum* (R. Rogers) R. Rogers).
Relationships: *P. pruinosum* is closely related to *P. patens* but it can be distinguished by its greenish, fragrant flowers, an often purplish labellum and a smaller labellum callus.
Cultivation: As for the genus.

Prasophyllum pyriforme E. Coleman
(pear-shaped)
Graceful Leek Orchid
Sept.–Jan.

Description: Leaf to 30cm long, slender, the free part to 20cm long, often withered at flowering time. Flower stem to 55cm long, bearing fifteen to about forty flowers, in a fairly dense spike to 20cm long. Flowers about 12mm across, variable in colour from yellowish green to brownish or purplish, sometimes with reddish or brown stripes, borne on turgid, projecting ovaries. Dorsal sepal to 12mm long, decurved or deflexed. Lateral sepals to 15mm long, erect or recurved, free or joined in the basal third, divergent. Petals to 12mm long, incurved or spreading. Labellum to 7mm × 4mm, recurved at about 90° in the upper half, white, pink or purplish, the margins crisped or wavy (often recurved behind the callus). Labellum callus extending nearly to the apex, raised, fleshy, greenish.
Distribution: Apparently endemic to Vic.
Notes: This poorly known species occupies a range of habitats but is most often seen in grassy situations and lightly timbered forests. It ranges from near sea level to over 1200m altitude. Plants are usually found in colonies. The flowers are very fragrant in warm weather. This species was previously confused with *P. gracile* R. Rogers.
Relationships: *P. pyriforme* is one of a group of very closely related species which are difficult to identify (see also *P. diversiflorum* and *P. rostratum*). It can be distinguished from *P. diversiflorum* by its non-channelled labellum callus and from *P. rostratum* by its stalked labellum.
Cultivation: As for the genus.

Prasophyllum regium R. Rogers
(royal)
King Leek Orchid
Sept.–Dec.

Description: Leaf to 1m long, thick, fleshy, the free part to 25cm long, erect. Flower stem to 1.8m long, stout, bearing fifteen to more than sixty flowers, well-spaced in a slender spike to 50cm long. Flowers about 15mm across, dull greenish brown (sometimes green or purplish black), borne on closely appressed ovaries. Dorsal sepal to 15mm long, ovate, projected forwards or downcurved. Lateral sepals to 15mm long, erect or curved, united for most of their length. Petals to 9mm long, often brown, incurved or spreading. Labellum about 9mm × 5mm, sharply recurved near the middle and again near the tip, pink or purplish with wavy margins. Labellum callus large, fleshy, greenish or brown, extending nearly to the apex.
Distribution: Endemic to south-western WA (Perth to Albany).
Notes: This species is impressive because of the large stature which some plants attain. It only flowers after summer fires but may then be locally plentiful and grows in loose colonies. In the northern part of its range this orchid favours winter-wet depressions and swamps, but in the high rainfall Karri and Jarrah forests of the lower south-west, it grows in well-drained sites scattered through the forest.
Relationships: *P. regium* is a distinctive species which can be recognised by its large size and the greenish brown flowers with a recurved labellum having a large fleshy callus occupying most of the surface.
Cultivation: As for the genus.

Prasophyllum rogersii Rupp
(after R. S. Rogers)
Marsh Leek Orchid
Dec.–Jan.

Description: Leaf to 25cm long, usually slender, the free part to 15cm long, often withered by flowering time. Flower stem to 30cm long, bearing three to fifteen flowers, widely spaced in a slender spike to 12cm long. Flowers

Three colour forms of *Prasophyllum regium*

about 8mm across, yellowish green suffused with red, borne on turgid, projecting ovaries, faintly perfumed. Dorsal sepal to 7mm long, projected forwards or deflexed. Lateral sepals to 7.5mm long, erect, not widely divergent, often joined together at the base. Petals to 7mm long, usually incurved and not spreading widely. Labellum to 6mm × 2.5mm, sharply recurved in the upper third, white or pink, the margins wavy. Labellum callus extending beyond the bend, green, thick and raised at the apex.

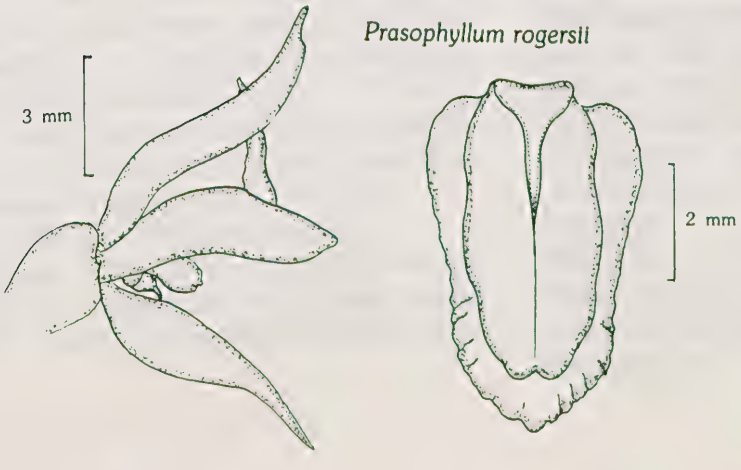
Distribution: NSW, Vic., Tas.; endemic.

Notes: This rather uncommon species is restricted to highland regions and is very sporadic in its distribution, extending as far north as the Barrington Tops of NSW. It grows in moist grassland and along the banks of small streams and is generally difficult to see. The flowers exude a faint perfume.

Relationships: *P. rogersii* is a poorly known species which can be distinguished by its rather small flowers with the lateral sepals not diverging widely and the labellum recurving in the upper third with the callus raised and thickened at the apex.

Cultivation: As for the genus.

Prasophyllum rogersii



Prasophyllum rostratum Lindley

(with a beak)

Slaty Leek Orchid — Sept.–Jan.

Description: Leaf to 30cm long, slender, the free part to 10cm long, often withered at flowering time. Flower stem to 45cm long, bearing ten to thirty flowers in a fairly dense spike to 15cm long. Flowers about 10 mm across, variable in colour from yellowish brown to pinkish or purplish, borne on turgid, projecting ovaries. Dorsal sepal to 8mm long, decurved or deflexed. Lateral sepals to 8mm long, erect or recurved, parallel or divergent. Petals to 7mm long, incurved or spreading. Labellum to 5.5mm × 3mm, sessile, recurved at 90° or more in the upper half, white, pink or purplish, the margins crisped or wavy (often recurved behind the callus). Labellum callus extending nearly to the apex, raised, fleshy, greenish.

Distribution: NSW (south-east), Vic,, Tas., SA; endemic.

Notes: This species occurs in both coastal districts and mountainous tracts, often in semi-open situations. The flowers are strongly fragrant in warm weather. This species has been confused with *P. gracile* R. Rogers.

Relationships: *P. rostratum* is a poorly known species which belongs to a complex group (see *P. diversiflorum* and *P. pyriforme*). It is closest to *P. pyriforme* and can be distinguished by its sessile labellum.

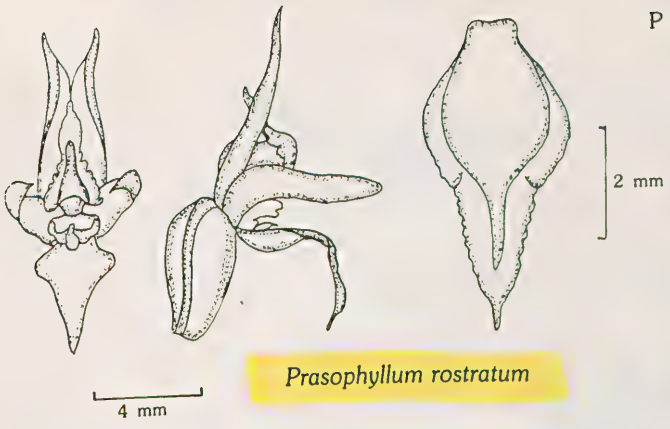
Cultivation: As for the genus.

Prasophyllum sargentii (Nicholls) A. S. George

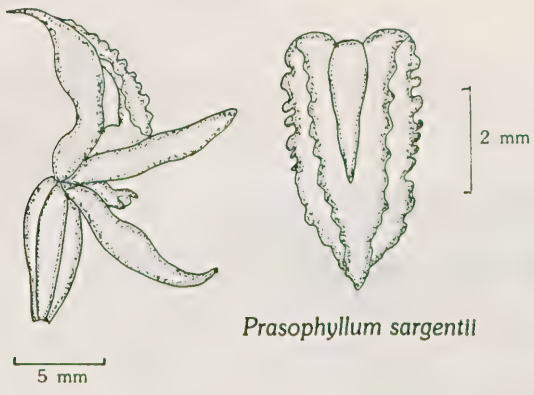
(after O. H. Sargent)

Aug.–Sept.

Description: Leaf to 25cm long, dark purplish, the free part to 20cm long, erect. Flower stem to 60cm long,



Prasophyllum rostratum



Prasophyllum sargentii

bearing ten to thirty-five flowers in a dense, crowded spike to 15cm long. Flowers about 12mm across, greenish brown, brown or golden brown with a white labellum and lateral sepals, scented, borne on closely appressed ovaries. Dorsal sepal to 10mm long, ovate, downcurved or deflexed. Lateral sepals to 10mm long, erect, curved, often white, united for most of their length. Petals to 10mm long, incurved. Labellum to 5mm × 2.5mm, sharply recurved in the upper half, crystalline white, the margins strongly crisped and wavy. Labellum callus extending about halfway, often pinkish, ending in two, prominently protruding projections.

Distribution: Endemic to south-western WA (north of Geraldton to Israelite Bay).

Notes: This species occurs in the woodlands of the wheat belt growing adjacent to swamps and in other moist sites. It forms colonies and flowering is stimulated by summer fires with sporadic flowering in other years. The flowers are sweetly perfumed.

Relationships: *P. sargentii* has affinities with *P. australe* but the flowers lack any striping and the labellum callus projects strongly forward at the point of curvature of the labellum.

Cultivation: As for the genus.

Prasophyllum striatum R. Br.

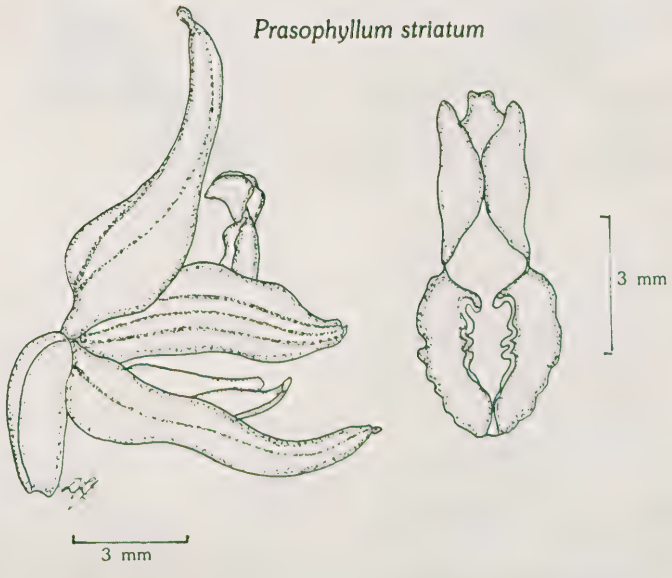
(streaked, striped)

Streaked Leek Orchid — Mar.–June

Description: Leaf to 20cm long, the free part about 10cm long, linear-filiform. Flower stem to 30cm long, slender, almost wiry, bearing two to ten flowers in a loose spike to 5cm long. Flowers about 7mm across, not opening widely, greenish with prominent white and brownish stripes. Dorsal sepal to 10mm long, ovate, hooded. Lateral sepals to 10mm long, humped at the base, united for their entire length, upcurved. Petals to 8mm long, lanceolate, hardly divergent, the apex gland-tipped. Labellum to 8mm × 4mm, curved gently upwards, with white, wavy margins. Labellum callus extending nearly to the apex, consisting of a thick plate which becomes a double, wavy ridge.

Distribution: Endemic to NSW (central coast).

Notes: This species is often locally common in low-lying depressions which are seasonally wet. It grows among grass and sedges. The flowers exude an unpleasant musty odour.



Prasophyllum striatum

Relationships: *P. striatum* is a very distinctive species which has as its closest relative *P. parvifolium* from WA. It can be distinguished from all other eastern species by its slender habit and prominently striped flowers which do not open widely.

Cultivation: As for the genus. Very difficult.

Prasophyllum subbisectum Nicholls

(nearly divided into two)

Oct.–Nov.

Description: Leaf to 12cm long, the free part to 6cm long, often withered at flowering time. Flower stem to 16cm long, bearing seven to fourteen flowers in a loose spike to 8cm long. Flowers about 6mm across, green with brown markings or wholly brownish, borne on projecting ovaries. Dorsal sepal to 3mm long, decurved or deflexed. Lateral sepals to 4mm long, erect or recurved, free, slightly divergent. Petals to 3mm long, spreading, prominently striped. Labellum about 5mm × 3mm, abruptly recurved near the middle, the margins whitish, irregular. Labellum callus extending nearly to the apex, hardly raised, deeply channelled.

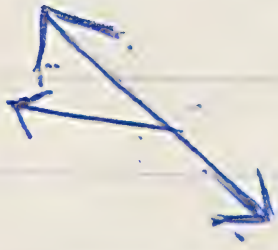
Distribution: Endemic to Vic. (south-west).

Notes: This rare species is known only from a single locality and has not been collected since 1932.

Relationships: *P. subbisectum* appears to be a distinct

CE · C.E. Gray

P. frenchii -



gracile -

Prasophyllum Frenchii

1966 Nov. 20th Flowering at Cowwarr.
27th " even better than last week. Some labellum brown + some mauve. Height 30-40 cm. Found by Mr. Peterson.

Scape:- up to 1ft Ours 23 cm.

Dorsal Sepal:- 10 mm - margins curved upwards and tapering to fine point which curves downwards. 3 mm wide at base.

Lateral Petals:- 5 mm narrow with sharply accuminate point. Curving inwards.

Lateral Sepals:- United 1/3 from base 12 mm - after separating. narrow & gradually tapering. Points crossed or meeting at tip.

Labellum:- 4 mm wide. centre green Δ shaped, edges transparent. Pronounced constriction just above bend then broadening & again tapering to very fine point. approx. 6 mm long.
If clawed very broad claw. ~~Pollen~~

Column:- Pollen boxes protruding in centre of flower. Δ appendage at base of Labellum, below where pollen tip joins flower. Δ edges light brown darkening on maturing.

Ovary:- 2-3 mm long, short stem

Leaf:- Usually shorter than scape but many chewed at tip so hard to be sure. Very dark green. Flower stalk and flowers very yellow green.

ill flowers on a short scape - fairly well spaced.

1967 Nov. 8th One leak orchid in bud, no other plants must be dry conditions may have come up later after rains but unable to go back to check.

1969 Nov 15th Flowering in numbers at Cowwarr. Some were very spiky looking other more broad

with a dark brown or maroon line down the middle of the flower segments. They were at least 2ft high. labellum constricted. A smaller plant had very small labellum curved well backwards & flower had pinkish look.
Another 2ft plant had brown down petals, lateral sepals divided - labellum curved back right through between sepals. A greenish plant had hat. Sepals crossed and labellum in front. Apparent quite versatile with positions of flower segments. However we named them because of stalk on at least lack of it to ovary as well.

1991 Nov 13 Plants in bud but no flowers yet.

1990 Nov 25 Plants flowering at Cowwarr. Its P. gracile & P. frenchii were combined under P. frenchii in 2nd edition of Census I left it under this name. However 3rd " " " changes P. gracile back to its own species under P. constrictum. I will have to send it down to Dr. Parson for identification

2001 July 11th In Pictorial Guide to Wild Orchids of Vic. it looks as if Slides 1820/5 is really P. sp. aff frenchii 2 as it was taken at Wilsons Prom.
712, 714, 717 all seem to be P. frenchii.

lindleyanum

Prasophyllum (brainei) (Green leek-orchid)

1989 Oct. Plant flowering on heathlands of Croajingolong Nat. Park. Identified by Neil Peasley.

1989 Jan 28th Flowering at Bryces Gorge lookout on Carey Road Unfortunately I did not take all the details but did realise that base of column & surrounds is much lighter red than the deep colour of P. suttonii. Also labellum was pointed out so that apex was quite visible not rolled under like P. suttonii All specimens of suttonii we saw were finished flowering while only the lower flowers were blooming on P. brainei; so I suspect it flowers a little later.

Another different feature is that flower ~~stalk~~ spike of P. suttonii has a truncate appearance and does not taper off as does P. brainei, so consequently P. brainei has more flowers to a spike.

Margin of labellum is not nearly as fluted or undulate as that of P. suttonii. Labellum is ~~twisted~~ twisted to form an S shape which explains why tip is so visible. Flowers were white.

Prasophyllum odoratum Scented Leek-orchid.

2001 Nov 3. Flowering in Newborough Bush Identified by botany group when we were not present.

2003 June This species is missing in 1st ed of Census but there are 5 species of P. aff odoratum and 5 species of P. sp. aff odoratum.

2006 Sept 30 Flowering at Serenis Track at entrance. General opinion was that this plant was P. aff odoratum as nearest to present writings

Oct 6th Still flowering at Serenis Track.

(Cadgellianum or) P. spacelatium

Prasophyllum Alpinum

1967 Feb 6th Flowering at Erica. Much weaker & greener than at Baw Baw – no brown at all.

Scape :- 10 inches 9 flowers.

Leaf :- As long as flower.

Flower reversed.

Dorsal Sepal :- 2 mm wide 5 mm long tapering to point - greenish brown color.

lateral Petals :- 3 mm long 1 mm wide, green with brown stripe down middle, at about 45° angle above horizontal.

lateral Sepals :- 5 mm long 1 mm wide very close together, free at top, recurved at tip, brown on outside edges but almost transparent at centre edges.

Column :- Brown edges with tiny pollen masses in centre.

labellum :- Flower so small, labellum not noticeable without magnification. Green about 2.5 mm long broad at base & tapering suddenly. Callus right to tip and fairly numerous – dark red.

Ovary :- 3 mm long stalked with floral bract (very tiny) in front of ovary.

These were very small specimens – hope for bigger ones at some other time.

1968 Jan 18th Flowering at Baw Baw. Still small specimens perhaps above was typical.

1970 Jan 24th Flowering at Rocky Plains, Wulgulmerang.

1971 Jan 30th " " Howitt Springs.

1912 Jan 30 Flowering at Howitt Plains

1986 Jan 26 " " Lost Plain.

1992 Jan 25 " " Buckety Plains area and on Bogong High Plains

1995 Jan 15 Flowering on High plains on Dargo weekend

1996 " 20 " " " " " Hotham "

1997 " 18 " " " Mt Baldhead & Bentley's Plain

1998 In Muelleria Vol. 9 1996. D.L. Jones has sorted out the P. alpinum complex. P. alpinum is now considered endemic to Tasmania. P. colensoi is considered endemic to New Zealand. In Victoria there are now 2 species:- P. tadgellianum and P. spacelatum. Very separate by P. spacelatum with 14-15mm long flowers a leaf 28-38cm long 2-4mm across & lateral sepals ranging from completely free to completely connate; while P. tadgellianum has flowers 10-12mm long, leaf 10-20cm long 4-8mm wide and lateral sepals connate except near the apex. From my description over page I would suggest that specimen was P. spacelatum.

1999 Jan 23rd Recorded " flowering on Gelantipy weekend. Identified from specimen brought back.

2001 July 11th Slides 158/9 P. alpinum is probably P. spacelatum because flowers well separated & flowers down to where scape leaves leaf.

Slide 1912 also presumed to be P. spacelatum.

Slides 530A + 474/5 " " " P. spacelatum

Prasophyllum (alpinium) spacelatum

2006 Jan 4th. Ralph photographed this orchid and called it P. alpina at Baw Baw. From Ralph's photo I would say this specimen is P. spacelatum as the flowers appear to be well spaced & the lateral sepals are definitely connate the whole length. P. alpinum is considered restricted to Tasmania. (Flora & Fauna Dept: CD)

Prasophyllum spicatum Congested leek-orchid

1995 Oct 28th Flowering on Wonthaggi Heathlands. Identified by Andrew Paget. Just towards the coast past the junctions of tracks - one going towards coast other along coast.

2001 July 11th Slides 1167/9 are presumed to now be P. radgellianum with flowers close together, colours much browner rather than reddish brown.

Prasophyllum Suttonii

1967 Feb 6th Flowering on top of Erica.

Scape:- up to approx 1ft many flowers.

Leaf :- Same as flower stalk.

Flower reversed.

Dorsal Sepal:- 2mm wide 6mm long. Purple color, broad at base + pointed at apex, curved upwards.

Lateral Petals:- 1.5 mm wide, 7 mm long. Same width all along + rounded at tip. White with purple vein down middle.

Lateral Sepals:- Free, very separate 5 mm 1.5 mm wide purple - About 2 mm apart.

Labellum:- White, 5mm wide, edge wavy, blunt at tip + recurved. Two ridges to bend or a little beyond.

Column:- Purple. Almost square with two upper corners curved towards the centre giving lily-like appearance. Pollen masses below the curved tips, triangular. Sticky tip above pollen masses in curves. Below pollen masses a deep red mass almost like two balls joined together. Does this attract insects?

pollen masses.

Column appendages like ears at each side of column dark red or purple.

Ovary: Stalked 4 mm long - ridged.

Does the pollen masses of Prasophyllum detach as do tongue orchids?

We saw many V pollen masses on the P. Suttonii at Erica. They were on the ovaries, stems + flowers.

1968 Jan 18th Flowering at Baw Baw. Must be later flowering plant than alpinum as we only saw a few flowers. There were lots of leaves which we surmised were Suttonii because of the ~~rec~~area + a few flowers near-by.

1970 Jan 24th Flowering at Rocky Plains, Wulgulmerang. and the Cobberas.

1971 Jan 30 Flowering at Howitt Springs and on Mt Howitt Hike.

1972 Jan 30 Flowering at Howitt Springs
Feb " " Mt St Gwinear

1973 Jan 26th " " Mt Baw Baw

1995 Jan 15th " " Dargo High Plains

1996 " 20th " " Hotham weekend on Mt Loch Track.

1997 " 18th " " Bentley's Plain & Mt Baldhead.

1999 " 24th " " Cielanti-pey weekend.

2001 July 11th P. suttonii is now recorded as only being in the Mt Buffalo area. Mt Hotham has P. candidum & the rest are probably P. alpestra P. candidum differs from P. alpestra by its more numerous, larger flowers (less colourful) with divergent lateral sepals & narrower, generally non-crenulate petals I think all our slides are P. alpestra.

Pratia pendunculata

2006 Oct 15th Flowering at Wonthaggi

Prostanthera cuneata.

Prostanthera melissifolia

Prostanthera incisa

Mrs. B. Thompson
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Contributions to the systematics of *Prostanthera* (Labiatae) in south-eastern Australia

Barry J. Conn

Abstract

Conn, B.J. (Royal Botanic Gardens, Mrs Macquaries Road, Sydney NSW 2000, Australia) 1997. Contributions to the systematics of Prostanthera *(Labiatae) in south-eastern Australia.* Telopea 7(4): 319–332. *Prostanthera cuneata* is regarded as endemic to mainland Australia, with the type material based on cultivated material grown in *Formosa* garden, Tasmania. The new species **Prostanthera galbraithiae** B.J.Conn is here formally described. A morphological re-evaluation of *Prostanthera melissifolia* concludes that this species is endemic to Victoria. *Prostanthera melissifolia* sensu Conn, from the Northern Tablelands of New South Wales, is *P. caerulea* R.Br., and *Prostanthera* sp. aff. *melissifolia* sensu Beauglehole, from East Gippsland (Victoria), probably is *P. incisa* R.Br. (s. lat.). A full description, habitat notes, distribution map and illustration of each of the first three species are provided.

Introduction

This paper presents the conclusions of revisionary studies into the genus *Prostanthera* section *Prostanthera*, arising particularly from work towards the preparation of an account of the genus for the forthcoming *Flora of Victoria*, volume 4.

Terminology follows Conn (1984), except inflorescence terminology as modified by Conn (1995). Distribution information for Victoria follows Conn (1993).

1. Distribution of *Prostanthera cuneata* Benth.

Previously, *Prostanthera cuneata* has been regarded as occurring in New South Wales, Tasmania and Victoria. Although the type specimen of this species (*Gunn 725*, 7 Dec. 1842) is stated to have been collected from the 'South Esk' River, south of Launceston in Tasmania, Buchanan (1988, 1990) states that Gunn actually collected from 'Formosa' garden, on the estate of W.E. Lawrence, on this date. Since all other Tasmanian collections of this species are either from known cultivated specimens or their collection source is unknown, it is here proposed that the Tasmanian records of this species are probably based on cultivated material. In particular, the type is likely to have been taken from cultivated material growing at 'Formosa' garden. This species is common throughout the Snowfields region of Victoria and subalpine region of the Southern Tablelands of New South Wales.

The significance of Gunn's comments on the habitat of this species in Tasmania is unclear. In a note sent with the original collection to the Royal Botanic Gardens, Kew (as stated in Sealey 1950, p. 132), he notes that this species 'grows abundantly on the banks of the South Esk [river] about 9 miles from Launceston, which is the only place I have seen it in the colony — it grows in the poorest gravelly sand washed up by the river'. Whatever the status of the collection at the time of Gunn's collection, the absence of any extant stands leads me to conclude that it is not native or naturalised in Tasmania now.

Taxonomy

Prostanthera cuneata Benth., in DC., Prodr. 12: 560 (1848).

J.D.Hook., Fl. Tasm. 1: 284, t. 90 (1857); F.Muell., Fragm. 6: 108 (1868); Benth., Fl. Austral. 5: 99 (1870); F.Muell., Syst. Census Austral. Pl., p. 101 (1882); Stirling, Trans. & Proc. Roy. Soc. Victoria 21: 42 (1883); F.Muell., Key Vict. Pl. 2: 42 (1885); F.Muell., Sec. Syst. Census Austral. Pl., p. 169 (1889); C.Moore, Handb. Fl. N.S.W., p. 352 (1893); Briq., in Engl. & Prantl, Nat. Pflanzenfam. 4(3a): 220 (1895); W.A.Dixon, Pl. New S. Wales, p. 232 (1906); Guilf., Austral. Pl., p. 302 (1911); Ewart, Fl. Victoria, p. 983 (1930); Sealy, in Curtis, Bot. Mag. 167: 132 (1950); W.M.Curtis, Fl. Tasmania 3: 554 (1967); B.J.Conn, Fl. New South Wales 3: 650 (1992).

Lectotype (here chosen): Tasmania: Cultivated at Formosa garden [not South Esk River, as stated on the BM herbarium sheet (in Gunn's hand)], *R.Gunn 725*, 7 Dec 1842 (BM); possible isolecto: (NSW 229615).

Usually erect, ± compact shrub 0.5–1.5 m high, often becoming trailing and/or procumbent with age. *Branches* ± terete, rarely subquadrangular, densely hairy throughout or within each axil to the next upper node; hairs ± straight, patent to spreading, short, 0.05–0.2 mm long, white; glands present. *Leaves* dark green above, paler below, strongly aromatic (when crushed); *petiole* absent or to 0.5 mm long; *lamina* obovate, rarely subcircular, frequently appearing obtriangular (cuneate) when margin and apex slightly recurved, (3–)4–6(–8) long, (2.5–)3.5–5 mm wide, glabrous or with occasional hairs, particularly towards base; base subcuneate to cuneate; margin entire, rarely crenulate; apex obtuse to rounded, often appearing truncate when apex slightly recurved; venation not visible, midrib slightly raised basally. *Inflorescence* a frondose racemiform conflorescence, uniflorescence monadic; 4–10–flowered per conflorescence. *Pherophylls* not seen. *Podium* 1–2 mm long, glandular, although appearing glabrous, usually moderately to densely hairy, but hairs minute, to 0.5 mm long. *Prophylls* persistent, inserted just below the calyx [propodium to anthopodium ratio (1.6–)4–11], opposite, narrow, oblong or elliptic to obovate, 2.5–3.5 mm long, 0.7–1.5 mm wide, with occasional hairs, particularly on margin (hairs 0.06–0.2 mm long), or glabrous, glandular; base subcuneate; margin entire, ± recurved; apex obtuse to rounded; venation faint. *Calyx* green, usually with purple tinge on lobes and/or adaxial surface, glabrous, except margin densely fringed with white hairs, often with hairs just extending onto inner surface at base of lobes; outer surface densely glandular basally, sparser distally; tube 2.5–3 mm long; *abaxial lobe* broadly ovate to broadly oblong, (2.2–)3–4.6 mm long, 3.2–4.3 mm wide at base, apex rounded to slightly emarginate, sinus to 0.1 mm long; *adaxial lobe* very broadly ovate to broadly ovate, 2.5–4 mm long, 3–4.4 mm wide at base, apex ± rounded. *Corolla* 9–15 mm long, pale lavender to almost white, inner abaxial-median surface of tube with irregular row of yellow spots flanked by brownish spots or maroon-orange spots, and laterally with dark violet/purple dots; outer surface glabrous basally, distally sparsely to moderately hairy, hairs 0.1–0.2 mm long, spreading, antrorse to retrorse, sparsely glandular (particularly in bud); inner surface glabrous, except mouth and base of lobes sparsely hairy, hairs 0.6–0.8 mm long; *tube* (5–)6–8 mm long; *abaxial median lobes* very broadly spathulate, 6.5–9 mm long, 7–9.5 mm wide, apex irregular and rounded, usually bilobed (sinus 1.2–1.5 mm long, 1.5–2.5 mm wide distally); *lateral lobes* very broadly to broadly ovate, 4–5.5 mm long, 3.5–5.5 mm wide, apex rounded and slightly irregular; *adaxial median lobe-pair* depressed ovate to very broadly ovate, (4–)5–6 mm long, (4–)7–8.5(–10) mm wide [length to width ratio 0.5–0.8], apex rounded to subtruncate, slightly irregular, bilobed (sinus 1–2(–2.5) mm long, median margin of lobes usually touching or overlapping). *Stamens* inserted 1.6–2.7 mm above base of corolla; filaments 3.7–5.4 mm long; anthers 1–1.4 mm long, lobes cristate on basal

dorsal surface (narrowly triangular trichomes 0.1–0.2 mm long) and with small acumen basally, connective extended to form a basal appendage 1–1.6 mm long, terminating in 1–5 narrowly triangular trichomes 0.1–0.2 mm long. Disc c. 0.3 mm long. *Pistil* 7.5–10 mm long; *ovary* cylindrical obovoid, 0.4–0.5 mm long, diameter at base 0.6–0.7 mm, lobes 0.1–0.2 mm long, glands present; *style* 6.6–8.5 mm long; *stigma lobes* 0.5–0.6 mm long. *Fruiting calyx* not or only slightly enlarged (abaxial lobe 2.5–4 mm long, 3–4 mm wide; adaxial lobe 3–4 mm long, 3.5–5 mm wide). *Mericarps* 1.8–2 mm long, distally 1–1.2 mm extended beyond base of style, distal diameter 2.3–2.5 mm; seeds ellipsoid-cylindrical, 1–1.2 mm long, c. 0.5 mm diameter. Fig. 1.

Flowering: (October–) November–February (–April). **Fruiting:** December–March.

Distribution: this species is distributed throughout the mountainous areas of southern New South Wales (Southern Tablelands) and eastern Victoria (Snowfields). Fig. 4.

Habitat: this species usually forms a dense shrub-layer under *Eucalyptus niphophila* subalpine woodland or in subalpine heathland communities (at altitudes of 1500–2000 m), on coarse sandy/gravelly soils, often peaty, frequently amongst conglomerate or granitic rocky outcrops. Associated species include *Olearia phlogoppapa, Bossiaea foliosa, Orites lancifolia, Baeckea ramosissima, Phebalium squamulosum* and *Grevillea australis*.

Notes: morphologically, this species is very homogeneous. Occasional plants in a population may have leaves that are crenulate and more rarely crenate. These plants are frequently taller than those that have entire leaves and probably represent a hybrid between *P. cuneata* and *P. lasianthos*. The origin of the presumed cultivated Tasmanian specimens is not known. Although, these collections tend to have narrower leaves and hairier prophylls than characteristic of most mainland populations, *Porter 003 & Conn*, from the Bogong High Plains (Victoria), is somewhat similar to the Tasmanian material.

Conservation status: this widespread species is not considered to be rare or threatened.

Selected specimens examined (258 examined): New South Wales: Southern Tablelands: Mt Kosciuszko National Park: Charlotte Pass, *Ashby 2825*, 3 Mar 1969 (AD 97120306); summit of Mt Bimberi, *Darbyshire 122*, 17 Jan 1961 (BRI 79384, CANB 89036, K, MEL 43027, NSW 229116); on road between Mt Gingera and Blackfellows Gap, *Darbyshire 155*, 15 Feb 1961 (BM, CANB 90406).

Victoria: Snowfields: near summit of Mt Stirling, *Corrick 7949*, 30 Jan 1982 (MEL 602631); Mt Buffalo plateau, *Hill 1268*, 31 Dec 1963 (AD 96410034); ascent from Dargo to Hotham Heights *Phillips 63*, without date (AD 97329180, CBG 046274); eastern slopes of Rocky Valley Dam catchment, Bogong High Plains area, *Porter 003 & Conn*, 18 Dec 1987 (NSW 196966).

Presumed cultivated Tasmanian material

Tasmania: Midlands: *s. loc., Ex W.H. Archer herb. s.n.*, without date (NSW 134359); Cultivated, Hobart Government Gardens, originally from Launceston, *Gunn 725/1842*, 3 Feb 1840 (HO 7279); *s. loc.* [?Formosa Garden at W.E. Lawrence estate], *Gunn 725/1842, anno* 1842 (NSW 229615); Formosa garden [not South Esk River], *Gunn 725/1842*, 7 Dec 1842 (HO 7278; NSW 134505); Formosa garden, *Gunn 725/1842*, 5 Dec. 1848 (NSW 134537); Perth [suburb of Launceston, presumed cultivated], *Rodway s.n.*, without date (HO 12925, NSW 231162); South Esk River, ?*C. Stuart s.n.*, 10 Dec 1851 (MEL 43031); Van Diemensland, *C. Stuart s.n.*, without date, (LUND, MEL 43029).

2. *Prostanthera galbraithiae*

Prostanthera galbraithiae *B.J.Conn*, **sp. nov.**

Prostanthera sp. aff. *linearis* R.Br. sensu Beauglehole, *Victorian Vasc. Pl. Checkl.* (1980)173.

Frutex erectus effusus 0.1–2 m altus. *Rami* plus minusve transverse quandrangulati, dense tomentosi, pilis antrorsis adpressis, 0.1–0.3 mm longis, sparsim glandiferi. *Folia* sessilia, plerumque glabra, sparsim glandifera; *lamina* anguste ovata vel oblonga,

Fig. 1: *Prostanthera cuneata* Benth. **a**, Flowering branchlet; **b**, detail of calyx and prophylls; **c**, stamens with basal appendage, showing ventral and dorsal views; **d**, open flower showing stamens and gynoecium; **e**, detail of branchlets showing the typically crowded leaves. (a *Gittins 432*; b–e *Porter 003 & Conn*). Scale bar: a = 30 mm; b = 4 mm; c = 2 mm; d = 6 mm; e = 6.7 mm.

(5–)8–15(–25) mm longa, ad 2 mm lata, basi subobtusa, margine integro plus minusve valde revoluto, apice plus minusve obtuso. *Podium* 1.5–2.3 mm longum. *Prophylla* 2–2.5 mm longa, 0.4–0.6 mm lata. *Calyx* extra sparsim ad moderate tomentosus, *tubo* 2–2.5 mm longo, *lobi* 2–3 mm longi. *Corolla* permalvina ad purpurea punctis marroninis, 7–10 mm longa, glaber, *tubo* 3–3.5 mm longo, *lobo abaxiali-mediano* late obovato ad leviter spathulato, 4.2–4.5 mm longo, *lobis lateralibus* late oblongis ad leviter late obovatis, 3.5–3.8 mm longis, *lobo adaxiali-mediano* depresse obovato ad perdepresse ovato, 3.5–5 mm longo. *Antherae* 1.2–1.5 mm longae, appendice absens. *Pistillum* 5.5–6 mm longum. *Mericarpia* non visa.

Holotype: Victoria: Gippsland Plains: Holey Plains State Park, *Conn 2486 & Corrick, 14 Oct 1986* (MEL 1552450); isotype: NSW 451472.

Erect or spreading subshrub or shrub, 0.1–2 m high. *Branches* ± transversely quadrangular in section, slightly laterally 2-ridged, especially on young branchlets, densely hairy [100–160 hairs/mm^2] between ridges and at nodes, otherwise glabrous; hairs antrorse, appressed, 0.1–0.3 mm long, white; glands scattered and usually very sparse. *Leaves* mid green, ± aromatic (when crushed), sessile, hence *petiole* absent; *lamina* very narrowly ovate or oblong, appearing ± linear because margin strongly revolute, (5–)8–15(–25) mm long, up to 2 mm wide [length to width ratio up to c. 13, length of maximum width from base to total lamina length ratio up to c. 0.1], glabrous, rarely with an occasional minute hair, sparsely glandular; base subobtuse; margin entire, ± strongly revolute; apex ± obtuse; venation indistinct, midrib slightly raised on abaxial surface. *Inflorescence* a frondose metabotryoidal conflorescence, uniflorescence racemiform, 8–24-flowered. *Podium* 1.5–3 mm long, densely hairy (similar to branchlets) or glabrous. *Prophylls* persistent, inserted just below the calyx [propodium 1.2–3 mm long; anthopodium 0.2–0.5 mm long; propodium to anthopodium ratio 6–7.5], opposite, narrowly elliptic, 2–2.5 mm long, 0.4–0.6 mm wide [length to width ratio c.5], glabrous or with a few scattered hairs near base at apex, not glandular; margin entire; apex obtuse; venation not visible. *Calyx* green abaxially, maroon adaxially; outer surface sparsely to moderately hairy, especially on abaxial surface of tube and on abaxial lobe, including margin of both lobes, adaxial surface (including lobe) usually glabrous, with hairs white, appressed, antrorse, c. 0.1 mm long, sparsely glandular; *tube* 2–2.5 mm long, with inner surface glabrous except for a few scattered hairs at mouth (hairs ± patent, to 0.1 mm long); *lobes* with inner surface densely hairy distally, with ± spreading hairs to c. 0.1 mm long; *abaxial lobe* very broadly ovate, 2–3 mm long, 2.4–3 mm wide at base [length to width ratio 0.7–1], apex rounded; *adaxial lobe* very broadly ovate, 2–3 mm long, 3.3–4 mm wide at base [length to width ratio 0.6–0.8], apex obtuse [adaxial lobe length to abaxial lobe length ratio 0.8–1]. *Corolla* 7–10 mm long, deep mauve to purple with maroon dots at base of lobes and in mouth and throat, glabrous, glands absent; *tube* 3–3.5 mm long; *abaxial median lobes* broadly obovate to slightly spathulate, 4.2–4.5 mm long, 3.5–5 mm wide [length to width ratio 0.8–1.3], apex slightly irregular and rounded, usually bilobed (sinus to 0.5 mm long, 1–1.5 mm wide distally); *lateral lobes* broad, oblong to slightly obovate, 3.5–3.8 mm long, 3.2–3.5 mm wide [length to width ratio 1–1.2]), apex rounded to almost truncate, slightly irregular; *adaxial median lobe-pair* depressed obovate to very depressed ovate, 3.5–5 mm long, 6.5–7 mm wide [length to width ratio 0.5–0.7], apex rounded, irregular, bilobed (sinus to 3.5 mm long, median margin of lobes usually touching or overlapping). *Stamens* inserted 2–2.2 mm above base of corolla; filaments 1.6–2 mm long; anthers 1.2–1.5 mm long, distinctly papillate, lobes with a few narrowly triangular trichomes c. 0.1 mm long on basal dorsal surface and usually with small acumen basally, connective lacking basal appendage. Disc c. 0.2 mm long. *Pistil* 5.5–6 mm long; *ovary* cylindrical obovoid, 0.4–0.5 mm long, diameter at base 0.5–0.6 mm, lobes 0.1–0.2 mm long, glands present; *style* c. 6 mm long; *stigma lobes* c. 0.3 mm long. *Mature fruits* not seen. Fig. 2.

Selected specimens examined (6 examined): Victoria: Gippsland Plains: c. 4 km SE of Dutson Downs and c. 500 m SW of track from Dutson Downs to the Ninety Mile Beach, *Conn 2485 & Corrick*, 14 Oct 1986 (MEL 1552449); Dutson Downs, 135 m from junction of track to Lake Reeve, *Robinson s.n.*, 10 Oct 1986 (MEL 1552737); Holey Plains State Park, Chessum Road, 0.2 km W of Kellys Road, *Conn 2487 & Corrick*, 14 Oct 1986 (CHR, MEL 1552448, NSW 451473, RSA); 200 m E of fire tower on summit of Holey Hill, *Walsh 1615*, 1 Oct 1986 (MEL, NSW 206771).

Distribution: this species is restricted to the Dutson Down–Holey Plains State Park region, Gippsland Plains, Victoria. Fig. 4.

Habitat: this species occurs in sandy soils, often quartz-rich or gravelly, overlying clays. This substrate supports an open *Eucalyptus obliqua* woodland community, with a heathland understorey dominated by *Leptospermum myrsinoides*, *Acacia oxycedrus*, *Epacris impressa*, *Lepidosperma concavum* and *Platylobium obtusangulum*. In more disturbed sites the ground layer is often dominated by bracken fern.

Etymology: the specific epithet honours Jean Galbraith who was one of the first people to discover this species and to recognise its vulnerability from inappropriate management procedures. Jean has made a significant contribution to our understanding of the flora of Victoria, particularly in association with the Latrobe Valley Field Naturalists Inc. Her efforts have directly resulted in the protection of the 'Wildflower Track' population of this species by the then Forestry Commission.

Notes: this species is characterised by having sessile, very narrowly ovate or oblong leaves that are more or less strongly revolute, corolla with abaxial median lobe approximately the same width as the lateral lobes, and distinctly papillate anthers that lack an appendage. The affinities of this species are uncertain, but it appears to have closest affinities with the *P. saxicola* group.

Conservation status: although the conservation status of *Prostanthera galbraithiae* is unknown, individual plants are sometimes locally common, especially after fire. However, most populations appear to be only represented by a few, scattered plants. Some populations appear to have been lost in recent years (Thompson, pers. comm. 26 March 1997; Walsh, pers. comm. 26 March 1997). The complete exclusion of disturbance (eg. fire) appears to be detrimental to the species, as observed at the 'Wildflower Track' reserve.

3. Systematics of *Prostanthera melissifola* F.Muell. (*s. str.*)

During the preparation of an account of the genus for the *Flora of New South Wales* project (Conn 1992), collections from northern New South Wales were incorrectly referred to *Prostanthera melissifolia*. Subsequent research has revealed that this species is endemic to Victoria, with the above collections from New South Wales redetermined as *P. caerulea* (further discussed below).

Taxonomy

Prostanthera melissifolia F.Muell., Fragm. 1: 19 (1858); 1: 242 (1859); Benth., Fl. Austral. 5: 95 (1870); F.Muell., Syst. Cens. Austral. Pl., p. 101 (1882); Sullivan in Wing, S. Sci. Rec. 3: 215 (1883) [as *Prostanthera mellissifolia*]; F. Muell., Key Vict. Pl. 2: 42 1885); 1: 386 (1887); Sec. Cens. Austral. Pl., p. 169 (1889); Briq. in Engl. & Prantl, Nat. Pflanzenfam 4(3a): 221 (1895); Guilf., Austral. Pl., p. 305 (1911); Ewart, Fl. Vict., p. 985 (1930); Worsdell, Index Lond. Suppl. pt. II(I–Z), p. 276 (1941); Althofer, Cradle of Incense, pp. 70, 72 & 73 (1978).

Lectotype (here chosen): Victoria: 'Upper Barwan [Barwon River] of Apollo Bay', *F. Mueller s.n., s. dat.* (MEL 43368); probable isolecto.: (MEL 43367, 43369 & 43370). (refer Typification)

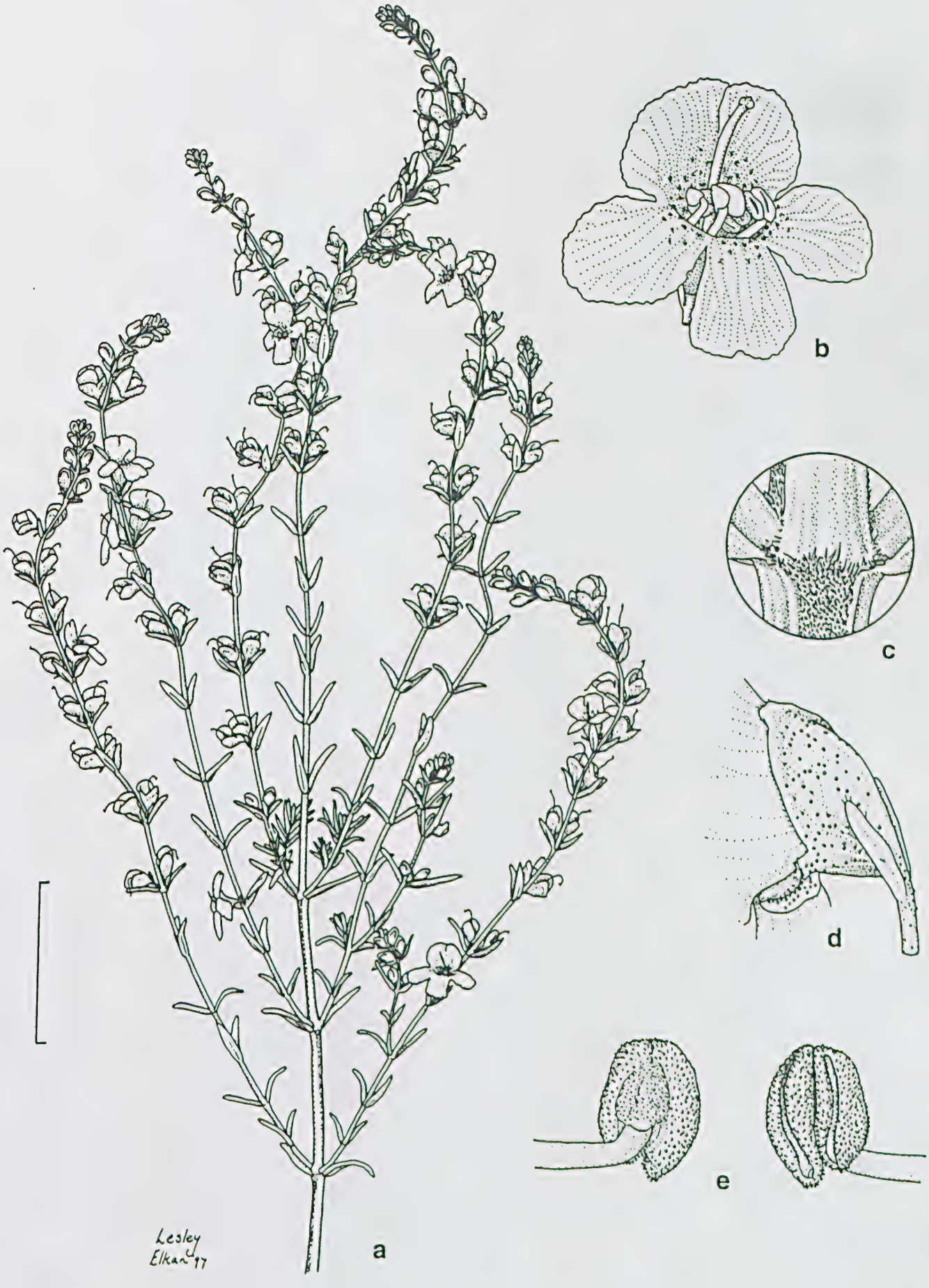

Fig. 2: *Prostanthera galbraithiae* B.J. Conn. **a**, Flowering branchlet; **b**, open flower showing stamens and gynoecium; **c**, detail of branchlets at node showing indumentum; **d**, lateral view of calyx, with detail of prophylls and propodium; **e**, ventral stamen, showing dorsal surface and connective(left) and ventral surfaces; (a – e *Conn 2488*). Scale bar: a = 30 mm; b = 6 mm; c = 3 mm; d = 4 mm; e = 2 mm.

P. melissifolia F. Muell. var. *parvifolia* Sealy, in Cotton, *Curtis's Bot. Mag.* 164(1948) t. 9687.

Iconotype (here chosen): Plate 9687, in Cotton, *Curtis's Bot. Mag.* 164(1948). (refer Typification)

Erect shrub to small tree, 1–5 m high. *Branches* subquadrangular, often with 2 pairs of lateral ridges, or terete, sparsely to moderately hairy particularly along lateral ridges and at nodes; hairs white, ± antrorse to slightly spreading, ± curled, c. 0.2 mm long; sparsely to moderately glandular. *Leaves* dark-green above, paler below, slightly and faintly unpleasantly aromatic, densely glandular; *petiole* (8–)10–15 mm long, usually deeply grooved adaxially, moderately to densely hairy (hairs as for branches); *lamina* ovate to narrowly ovate, rarely elliptic, 12–50(–60) mm long, 9–25(–30) mm wide [length to width ratio 1.2–2(–3)]; base attenuate, ± assymetric; margin toothed, rarely entire; teeth directed forward (0.5–1 mm long, 0.5–1 mm wide at base), 2–7 pairs of teeth, or teeth absent; apex obtuse; venation distinct, midrib and veins raised on abaxial surface; almost glabrous, except abaxial midrib and basal part of margin moderately to densely hairy (hairs as for branches), with adaxial midrib usually more sparsely hairy. *Inflorescence* a bracteose tribotryoidal to many-botryoidal conflorescence, occasionally botryoidal, uniflorescence a botryoid; (4–)10–20-flowered [per uniflorescence]. *Pherophylls* not persistent, broadly to narrowly ovate (apex appearing abruptly tapered when margin incurved), c. 2 mm long, c. 1 mm wide [length to width ratio 1.1–3.3], moderately hairy, with margin fimbriate (hairs c. 0.1 mm long), densely glandular; venation indistinct. *Podium* 2–3 mm long, moderately hairy (hairs as for branches), densely glandular. *Prophylls* usually maroon, persistent, inserted just below the calyx [propodium to anthopodium ratio c. 10], opposite, linear, 1–1.5 mm long, c. 0.1 mm wide [length to width ratio 6–10]; moderately hairy particularly along margin, moderately glandular; margin entire, incurved; apex obtuse; venation not visible. *Calyx* green, often with maroon tinge; outer surface sparsely hairy particularly on margin and between base of lobes (hairs as for branches), very densely glandular; inner surface glabrous; tube 1.8–2.3 mm long; *abaxial lobe* very broadly ovate to ovate, 1.5–2.5 mm long, 2–2.3 mm wide [length to width ratio 0.7–1.3], apex rounded, occasionally slightly emarginate; *adaxial lobe* depressed ovate to oblong, 1.5–2.5 mm long, 2.5–3 mm [length to width ratio 0.6–1], apex rounded [adaxial lobe length to abaxial lobe length ratio c. 1]. *Corolla* (8–)10–12 mm long, dark mauve, occasionally pinkish, markings absent; outer surface glabrous near base, sparsely to moderately hairy distally (hairs as for branches), sparsely glandular; inner surface glabrous, except margin of lobes fimbriate (hairs ± tangled, 0.1–0.3 mm long), or sparsely to moderately hairy on lobes; *tube* abruptly broadly campanulate (collar-like at base), 5–6 mm long; *abaxial median lobes* ± circular to obovate, 5.5–7 mm long, 5–6 mm wide [length to width ratio 1–1.2], apex rounded, often slightly irregular, slightly bilobed (sinus to 0.3 mm long, to 2 mm wide distally); *lateral lobes* ovate, 4.2–6 mm long, 4.8–6 mm wide [length to width ratio 0.9–1], apex slightly irregular, rounded to slightly retuse; *adaxial median lobe-pair* depressed ovate, 3–3.5 mm long, 7–8 mm wide [length to width ratio c. 0.3], apex rounded, irregular, bilobed (sinus 3–3.5 mm long, 2.5–3 mm wide). *Stamens* inserted 1–1.5 mm above base of corolla; filaments 2.5–3 mm long; anthers dark purple, 1.2–1.5 mm long, lobes cristate on basal dorsal surface (trichomes narrowly triangular, 0.1–0.2 mm long) and with small acumen basally 0.1–0.2 mm long, basal appendages 1 or 2 per locule (usually with 1 undeveloped), to 0.5 mm long, frequently appearing absent, frequently with narrowly triangular trichomes distally. Disc c. 0.2 mm long. *Pistil* 8–10.5 mm long, often glandular; *ovary* cylindrical obovoid, 0.4–0.6 mm long, diameter at base 0.2–0.4 mm, lobes 0.1–0.2 mm long; *style* lilac, 7–10 mm long; *stigma lobes* 0.3–0.4 mm long (to 0.8 mm long in fruit). *Fruiting calyx* slightly enlarged (abaxial lobe 4–4.5 mm long, 4–4.5 mm wide [length to width ratio 0.9]; adaxial lobe 4.5–5 mm long, 5.5–6 mm wide [length to width ratio 0.8–0.9]; [adaxial lobe length to abaxial lobe length ratio 1–1.3]). *Mericarps* 1.8–2 mm

long, distally c. 1 mm extended beyond base of style, distal diameter 2–2.5 mm; seeds ellipsoid-cylindrical, c. 1 mm long, c. 0.5 mm diameter. Fig. 3.

Distribution: this species is here regarded as endemic in Victoria, occurring from the Otway Ranges (in the west), Eastern Highlands, Gippsland Highlands, Snowfields and (doubtfully) East Gippsland (in the east)(see Notes, below). Fig. 4.

Flowering: November–January (–April). **Fruiting:** December–January (–June). Last season's old fruits frequently persist on the plant.

Vernacular name: Balm Mint-bush (Willis 1973, p. 588).

Notes: the leaves of this species are morphologically variable. However, local populations are usually relatively homogeneous, except that smaller leaves frequently occur on the distal end of branches (particularly near inflorescence). In general, at higher altitudes, there is a reduction in leaf size, such as near Lake Mountain (*Forbes 1909*) and Powelltown (*Muir 955* – MEL 48250). However, plants with smaller leaves occur within populations of otherwise normal leaf-sized plants (eg. near Foster, *Beauglehole 63002*, between Toora and Gunyah, *Willis & Smith s.n.*, and two plants seen (one destroyed) from near Creswick, *Hateley s.n.*). Since *Prostanthera melissifolia* var. *parvifolia* is merely one of these small leaf variants, it is here reduced to the synonymy of *P. melissifolia*. The leaf margin is variously toothed, varying between leaves of a single plant, within-populations (*Muir* 955 – NSW 253733) or between-populations. Detailed population studies are required to evaluate the taxonomic status of this latter collection. However, apart from the leaf-margin, all other features are typical of *P. melissifolia*.

Although this species has been once recorded as occurring in the You Yangs (Midlands, Victoria)(*Walter s.n.*), it no longer appears to occur there. It is possible that this locality is incorrect.

Whether or not *P. melissifolia* occurs in East Gippsland is not known. One collection (*Willis & Beauglehole s.n.*) from the Howe Range has ovate leaves with somewhat oblique leaf bases more characteristic of the nominate variant from the Otways Range. Since Willis' locality information is usually accurate, this collection is anomalous. For a discussion of the typical Howe Range populations, previously regarded as *P.* sp. *aff. melissifolia*, refer to *P. incisa* R.Br. *s. lat.* (below).

Typification: although the four Mueller collections of *Prostanthera melissifolia*, as held at MEL, are from the same locality, MEL 43368 is here chosen as the lectotype because it has several flowers (with corolla and anthers intact) remaining on the collection. The other collections (cited above) have fewer flowers (corolla and anthers intact) or flowers with only calyx and gynoecium remaining.

Unfortunately, there appears to be no herbarium material of *P. melissifolia* var. *parvifolia*. This material was originally introduced to the Royal Botanic Gardens, Kew in 1929 as *P. sieberi*, from material cultivated in New Zealand (Sealy 1948). Since the illustrations (t. 9687) included with the protologue are sufficient to circumscribe this taxon, these are chosen as the iconotype.

Habitat: throughout much of it range, this species is commonly associated with openings in the forest, particularly along roads, and margin of Open Tall *Eucalyptus*-dominated (Wet Sclerophyll) forest, at altitudes of 250–700 m. The dominant eucalypts are usually *Eucalyptus obliqua* or *E. regnans*. The understorey typically consists of *Hedycarya angustifolia, Bedfordia arborescens, Cyathea australis, Dicksonia antarctica, Olearia lirata, Polyscias sambucifolia, Acacia dealbata*, and *Pomaderris* spp.

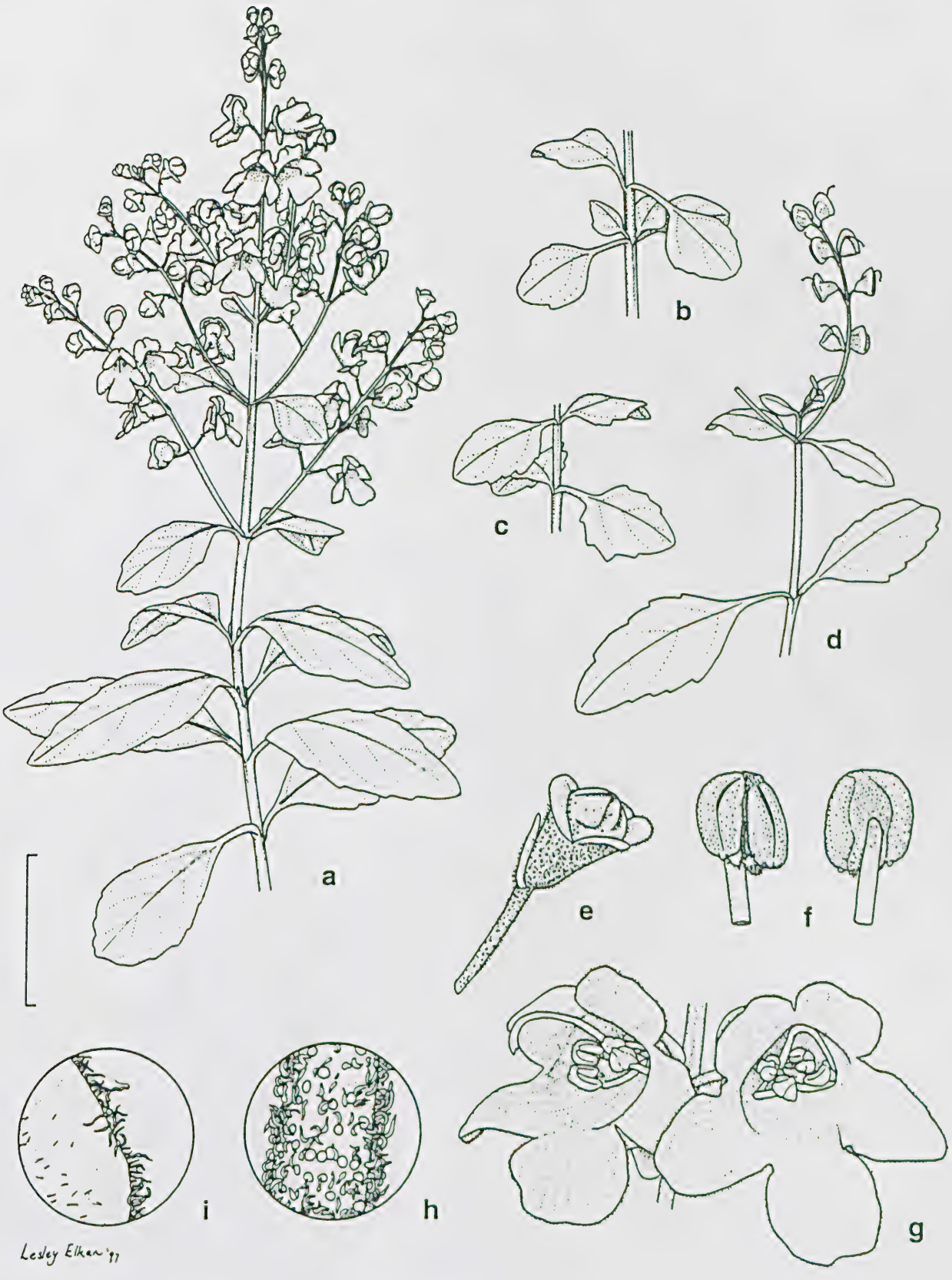

Fig. 3: *Prostanthera melissifolia* F.Muell. a, Flowering branchlet; b, branchlet showing smaller leaves with slightly attenuate lamina bases; c, branchlet showing smaller leaves with more rounded lamina bases; d, branchlet with larger leaves and young infructescence; e, detail of calyx, prophylls and propodium in bud; f, ventral stamen, showing ventral surface (left) and dorsal surface and connective (right); g, open flowers showing stamens and gynoecium; h, detail of indumentum and sessile glands on branchlet; i, indumentum on margin of corolla lobes. (a, e–i *Conn 3044*; b *Forbes 1909*; c *Nordenstam & Anderberg 1187*; d *Mueller s.n.*, MEL 43368). Scale bar: a–d = 30 mm; e = 4 mm; f = 2 mm; g = 6 mm; h & i = 1.2 mm.

Selected specimens examined (c. 90 examined). Victoria: Snowfields: Lake Mountain Road, near Kellys Plain, *Forbes 1909*, 21 Dec 1983 (MEL 665262, NSW 410716); ?East Gippsland: Howe Range, *Willis & Beauglehole s.n.*, 2 Nov 1969 (MEL 43371)(refer Notes, above); Eastern Highlands: 0.9 km (by road) S of Dom Dom Saddle, Black Spur on Maroondah Highway, *Conn 3044*, 11 Nov 1988 (AD, KUN, MEL, NSW 218450, NY); Above Ada River, c. 6 miles NE of Powelltown, *Muir 955*, 13 Dec 1959 (MEL 48250, NSW 253773); Gippsland Highlands: Bulga National Park, *Carrick 3322*, 23 Jan 1973 (AD 97331154); Grand Ridge Road, 1 km W of Dingoes Creek Road, 19 km NE of Forster Post Office, *Beauglehole 63002*, 21 Dec 1978 (MEL); Grand Ridge Road, 4 km E of English Corner, *Walsh 190*, 22 Nov 1978 (MEL 547864); Between Toora and Gunyah, S. Gippsland, *Willis & Smith s.n.*, Nov 1951 (MEL 43373); Midlands: Creswick Plantations, *Hateley s.n.*, Feb 1986 (MEL 1546704); You Yangs, *Walter s.n.*, Oct 1892 (NSW 134088); Otway Range: Mt Sabine, on road to Forest, *Melville 3196*, 27 Feb 1953 (MEL 1554255, NSW 253676).

4. Status of *Prostanthera melissifolia* sensu Conn (1992)

Prostanthera melissifolia F.Muell. sensu B.J.Conn, Fl. New South Wales 3: 655, 656 (1992) non F.Muell. (1858) = **Prostanthera caerulea** R.Br. (refer 'Orthography', below)

Notes: Morphologically, *Prostanthera caerulea* and *P. melissifolia* are superficially very similar, with both having similar indumentum on branchlets, densely glandular calyces, and variously mauve corollas that lack markings. The leaf lamina of *P. caerulea* is usually narrowly ovate (occasionally ovate), 18–65 mm long, 6–22 mm wide [length to width ratio c. 3], with base cuneate to narrowly obtuse, symmetric, and petiole 2–12 mm long; whereas that of *P. melissifolia* is ovate to narrowly ovate, rarely elliptic, 12–50(–60) mm long, 9–25(–30) mm wide [length to width ratio 1.2–2(–3)], with base attenuate, more or less asymmetric, and petiole (8–)10–15 mm long. In *P. melissifolia*, the prophylls are

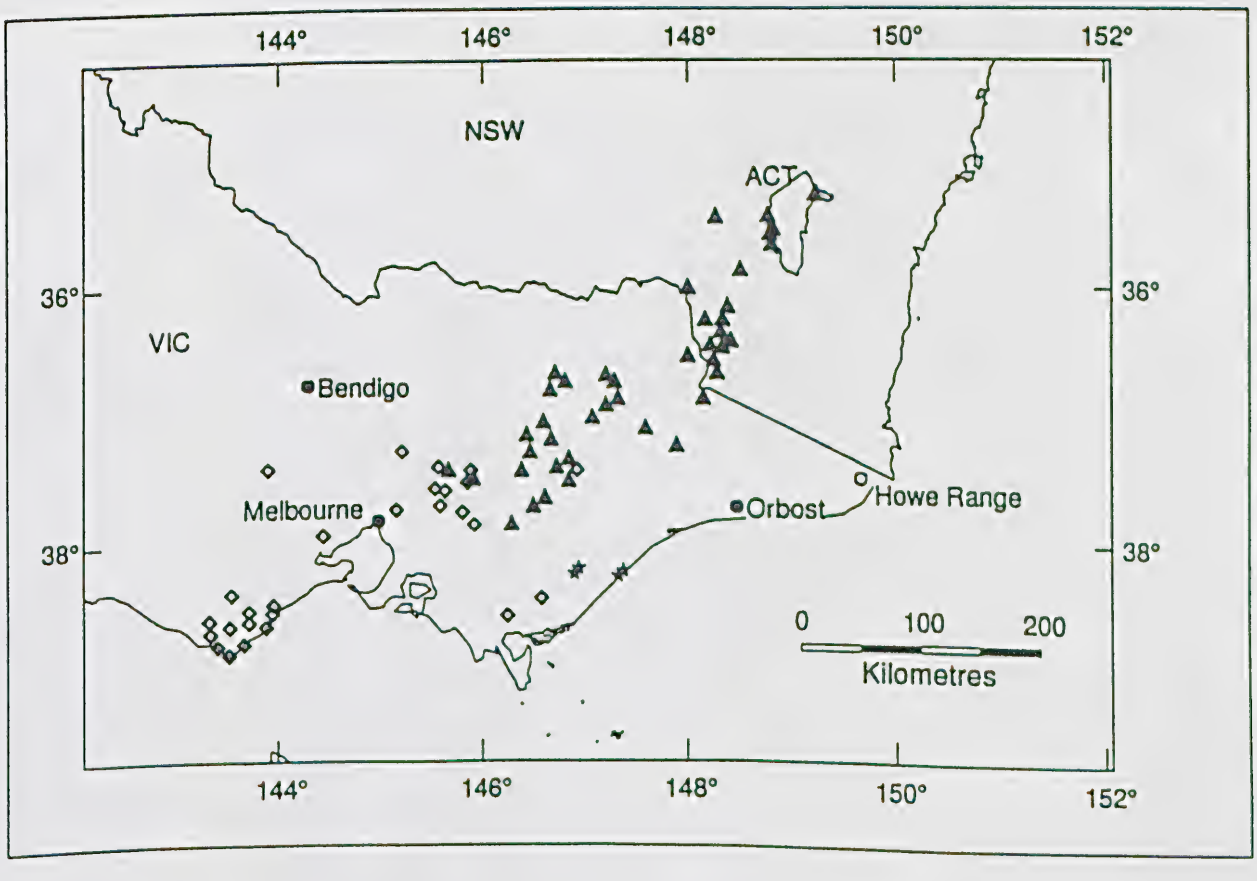

Fig. 4: Distribution of species in Victoria and south-eastern New South Wales; *Prostanthera cuneata* (solid triangle); *P. galbraithiae* (solid star); *P. melissifolia* (open diamond). Note: open circle refers to locality of the Howe Range.

persistent, 1–1.5 mm long, c. 0.1 mm wide (cf. in *P. caerulea*, not persistent, 2.5–3 mm long, c. 0.5 mm wide). The stamens of *P. melissifolia* lack anther appendages, whereas although appearing to be absent in *P. caerulea* they are only c. 0.5 mm long. *Prostanthera caerulea* is an erect shrub, 0.5–3 m high, that flowers in spring (from September to November), whereas *P. melissifolia* is an erect shrub to small tree, 1–5 m high, flowering in summer (from November to January, rarely to April). *Prostanthera caerulea* occurs from southern Queensland to the Northern Tablelands, Central Tablelands, North Coast and Central Coast regions of New South Wales.

Orthography: there has been some confusion as to the correct spelling of *Prostanthera caerulea*. In the protologue, Brown (1810, p. 508) used the diphthong 'æ'in the specific epithet, namely '*cærulea*'. However, confusion has occurred because the italicisation of 'æ' superficially looked like the diphthong 'œ'('æ' italicised becomes '*æ*'). This is clear from Brown's use of 'æ' in '*Antheræ*' in the protologue. For a distinction between italicised and non-italicised 'æ' diphthong refer Fowler (1965: 12). Bentham (1834, p. 450) was the first to inadvertently convert 'æ' to 'œ' (as 'CŒRULEA'), and later by Mueller (1867: 106)(as 'cœrulea') and again by Bentham (1870: 94)(as 'coerulea'). More recently, Chapman (1991) followed Bentham's (1870) spelling of the epithet, rather than the entry in *Index Kewensis* (Hooker & Jackson 1894: 630).

5. Prostanthera incisa R.Br., P. violacea sensu Ewart (1931), and P. sp. aff. melissifolia sensu Beauglehole (1980)

Ewart (1931) identified collections of *Prostanthera* from Cape Howe and Cann River (both East Gippsland) as *P. incisa* R.Br. and *P. violacea* R.Br., respectively. Although Willis (1973) excluded these two species from the flora of Victoria, he did not indicate which species these collections belonged to. However, he did suggest that the reference to *P. violacea* was based on 'an erroneous record' (Willis 1972, p. 590). Likewise, the validity of the reference to *P. violacea* var. *albiflora* [F.Muell.] (Ewart 1931, p. 984) is unknown because no collections are referred to this taxon. Subsequently, the affinities of the Howe Range material have been placed with *P. melissifolia* (as *P.* sp. *aff. melissifolia*, Beauglehole 1980). Although there is some doubt about the true identity of the Howe Range collections, it is here concluded that they are best regarded as part of *P. incisa* R.Br. *sensu lato* (as applied by Conn 1992).

Taxonomy

The following description is provided to assist in the recognition of the East Gippsland populations here referred to this taxon.

Prostanthera incisa R.Br., *Prodr.* (1810) 509.

Type: 'Grose [River], first branch', *Brown [Bennett 2367] s.n.*, 'Dec 23, 1804' (Brown ms.)(BM, 3 sheets).

Prostanthera sp. aff. *melissifolia* sensu Beauglehole, *Victorian Vasc. Pl. Checkl.* (1980)173.

At least in part, probably based on: *Beauglehole 31386, 31450, 33659, 32527* (refer Notes, below).

Prostanthera incisa sensu Ewart, *Fl. Victoria* (1931) 985

Possibly based on: 'Cape Howe Ranges, Vict.', *Walter s.n.*, no date (MEL 43377).

Possible synonyms:

Prostanthera violacea sensu Ewart, Fl. Victoria (1931) 984, non R.Br. (1810).

Based on: Unknown.

Prostanthera violaceae var. *albiflora* sensu Ewart, Fl. Victoria (1931) 984, ? non F. Muell. (1867).

Based on: Unknown.

Erect (fide MEL, Oct 1997), openly branched shrub, 2–2.5 m high, strongly and ± unpleasantly aromatic; branches laterally ridged, moderately to densely covered with short, curled hairs, densely covered with subsessile glands. Leaves green, paler below, covered with short, curled hairs basally and along midrib of abaxial surface, densely covered with subsessile glands; petiole 3–10 mm long; lamina ovate, 15–30 mm long, 8–12 mm wide; base short- to long-attenuate and ± decurrent, usually symmetric; margin ± coarsely toothed with teeth directed forward to laterally; apex obtuse. Inflorescence a frondobracteose botryoid. Prophylls not persistent, c. 1 mm long, c. 0.2 mm wide. Calyx 4–5 mm long; tube c. 2 mm long; adaxial lobe c. 2 mm long (slightly enlarged in fruit). Corolla pale mauve to mauve, 7–10 mm long. Anthers with appendage greatly reduce, only slightly extended beyond anther locule, hence appearing absent, each locule with a tuft of basal narrowly triangular trichomes.

Flowering: September–November. **Fruiting:** November–December.

Victorian specimens examined: East Gippsland: About 2 km SE of Mt Carlyle summit, *Albrecht 3625 & Walsh*, 4 Sep 1988 (MEL, NSW 451476); Howe Ranges, *Beauglehole 31386*, 30 Oct 1969 (AD 97209279); *31450*, 1 Nov 1969 (AD 97209277); *33659*, 8 Aug 1970 (AD 97209222); Mallacoota Inlet National Park, *Beauglehole 32527*, 16 Dec 1969 (AD 97209278); Cape Howe Range, *Walter s.n.*, without date (MEL 43377); Howe Range, *Willis s.n.*, 24 Oct 1948 (MEL 43372).

Distribution: *Prostanthera incisa* (*s. lat.*) occurs in the Central Tablelands, North Coast, Central Coast and South Coast regions of New South Wales, and is here extended to included the Howe Range populations (refer Fig. 4) of East Gippsland in Victoria.

Habitat: tall open forests dominated by *Eucalyptus muelleriana*, *E. smithii* and *Callitris rhomboidea*.

Vernacular name: cut-leaf Mint-bush (Ewart 1931, p. 985; Willis 1973, p. 588).

Notes: although Beauglehole (1980) did not cite any collections as vouchers of his informal name '*P.* sp. aff. *melissifolia*', his reference to region 'Z' (namely, East Gippsland), suggests that he was referring to the Howe Range/Mallacoota National Park populations of this species.

Apart from distributional data, little is know about this taxon. Although these populations are morphologically very similar to *P. melissifolia* (at least in herbarium material), the leaves tend to be smaller and narrower than the latter. It is not entirely certain, but the Howe Range populations tend to be strongly aromatic, more typical of the known New South Wales populations of *P. incisa* and *P. sieberi*. Although variable, the prophylls tend to be inserted on the distal third of the podium, whereas those of *P. melissifolia* are inserted just below the calyx.

Studies into the systematics of the *P. incisa–P. sieberi* complex are necessary before the status of these Howe Range populations can be completely resolved.

Acknowledgments

I gratefully thank Margaret Corrick (joint collection of the type specimen of *Prostanthera galbraithiae* B.J.Conn) (then MEL) for her assistance in the field. Bonnie Thompson (South Traralgon) and Neville Walsh (MEL) generously provided advice on the conservation status of this species. Lesley Elkan (NSW) prepared the illustrations in this paper. I thank the Directors and Curators of the many herbaria for allowing me the opportunity of studying material in their care.

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Manuscript accepted 16 January 1998

Prostanthera aspalathoides Scarlet Mint-bush

1972 Aug 28th. Flowering near ♀ in the little Desert.
Flowers red with 2 two petals broad ♀ notched
♀ longer than lower lip.
leaves small, clustered together and seem to
pimpled with blunt points.
Branches minutely hairy. - foliage
scented.

1973 Sept 3rd Flowering in the Whipstick.

Prostanthera cuneata. Alpine

1968 Jan 18th large mauve + white flowers on Baw Baw just before we reached the top. leaves more diamond shaped than wedge shaped but point is inclined to turn under + then it is more wedge shaped. Little leaves ½" long alt most + very closely arranged. Not very high plant, about 2'6" to 3' high.

1969 Nov 23rd flowering on Mt Baw Baw.

1970 Jan 25th " at the Cobberas

1971 Jan 30 " " Mt Howitt Hike. Bushes about 3ft high, very robust, with lovely large flowers.

1972 Feb. flowering at Mt St. Ciwinear.

1992 Jan 26th " on Bogong High Plains.

1995 Jan 15th " " Dargo weekend on High Plains

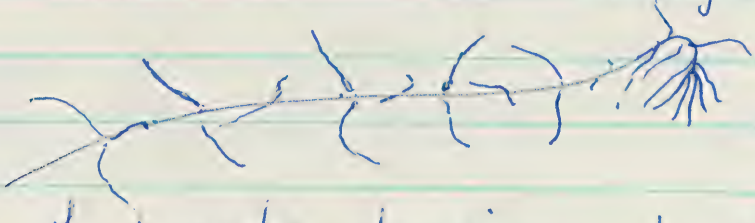
1996 " 20th " " Hotham weekend on " "

" also at Victoria Falls.

2006 Jan 14th " " Baw Baw.

Prostanthera. decussata

1973 Mch 17 Plants growing at Lake Tali Khan
Only one flower found. Mauve.
leaves decussate appearing 1mm wide & 1 cm long but edges curved under to meet at centre. Plant very hairy with what appear to be very stiff single bristles
Margin of leaf appears to be undulating but only very small undulations but hard to see as they met at back. leaf pimply at base of bristles.
Branches & branchlets brown & densly hairy. Branchlets decussate.
leaves not stiffly straight but curved in various directions some up, some down, general tendency of leaves to hang down the branch, even those curling up.



End of branche drooping not due to wilting but Ollies says like that on bush.

1988 Jan 24 Specimen brought to camp by John Mewett from track up past tanks from Nicola School camp.

1991 Oct 12th Plant growing at Mt Hedrick. This specimen was P. saxicola as the leaves were incurved.

Prostanthera Denticulata (Rough)

1966 25 Sept Flowering at Cowwan

1968 Oct 13th " " "

1969 Sept 13th Special variety at Rosedale in flower. Color is very dark purple lovely picture.

Sept 28th Flowering in profusion along Chessum Road. Plants up to 5 to 10ft high.

Oct 4th Flowering at Couwarr. While leaf structure is the same in the two plants the flowers are very different. The Couwarr variety is white & blue or mauve & rather small but with quite a number of flowers. while the Rosedale variety is dark purple much larger and flowers much more sparse. and delicate.

Nov 2nd Still flowering at Couwarr.

1970 Sept 26th Flowering near Chessum Rd. Longford. Quite a lot of bushes in this area.

Oct. 1. Flowering in new area Rosedale

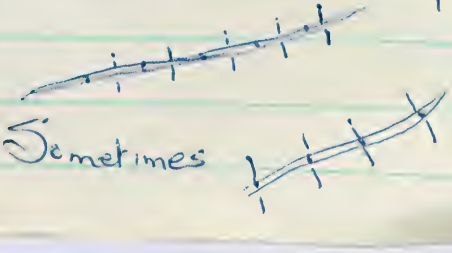
1971 Oct 10th Plant planted in reserve flowering. This is usual form.

1st Flowering in garden - Rosedale form.

10th " at Rosedale.

Nov 13th " at Couwarr.

1972 Aug 28th Plant growing in the Little Desert. This plant has very small leaves about 3mm long opposite & decussate. Stem very white with no leaves, leaves only on side branches



1972 Sept 10th Flowering at Rosedale

1973 May 13th " "

Sept 3rd " in the Whipstick.

The plant at Rosedale was named P. galbraithiae in 1998.

Prostanthera galbraithiae

For distribution, etc of this species look for P. denticulata - Rosedale

2004 ~~Dec~~ Oct 23rd. Flowering in Holey Plains at end of Jack's Track. There was also a plant with white petals and one with pink petals. We have not heard of these forms before. Ken Harris photographed both forms.

Prostanthera hurtulka.. Hairy Mint-bush

1989 Sept 16th Plants just beginning to flower. Flowers deep purple; leaves app. 1cm long.

Prostanthera lasianthos (Christmas bush)

1966 Dec 29th Flowering in hills. Pale lilac flowers with 2 orange dots.
1967 Dec 10th Flowering T'gon Creek Rd up Leroy.
31st " opp. O. Lades.
1968 Jan 4th " Callignee.
Dec 22 " Morwell Nat Park
1969 Jan 1st " Senini's Track
Feb 1st Still a few flowers on plants at Tyers.
Dec 15th Flowering along Jeeralang Rd.

1970 Jan 18th Flowering along Seninis Track
Nov 25th " at Briagalong.
1972 Jan 30th Plant growing at headwaters of McAlister River.
1986 June 20th Flowering in Crown Land off Balook Road before Sunday Road (next to our bush paddock) Plants about 12ft - 15ft high but plants not bushy at top, more conical shape, with many flowers. Usually flowers around here in December.
1992 Jan 26th Flowering along Loop Rd. from Fall's Creek to Homan's Gap.
1993 Jan 31 Plants growing in Errinundra N.P.
1994 May 1 Many young plants growing in Austen's property near Darlimurla.
Oct 30 Plant growing in Dawson Water Reserve.
1995 Jan 15 " " on Dargo weekend
1997 " 18th " " " Mt Nugong.
1991 " 27th " " " Celantipy weekend.
1991 " 23rd " " " " "
2004 Apr 3 " " " Colley's Rd. Block

Prostanthera melissifolia (Balm)

1968 Nov 23rd Flowering ~~Terrey Valley~~ Bulga Park - lovely Blue.

1969 Dec 15th Flowering along Jeeralang Road near turn off to the Parks.

Prostanthera Rotundifolia (Round-leaf)

1966 25 Sept Flowering at Stony Creek.
1967 Nov 5th " " " "
Leaves under ¾" Flowers small.
1968 Oct 13th Flowering at Stoney Creek.
1969 Oct 4th " " " "
Nov 2nd " " Briagalong.
1970 Oct 17th " " "
1971 Aug 30 Flowering at Flat Rock & Mt Arapiles.
Leaves almost circular ○ on quite long stems. Just a few flowers in bloom but lots of buds. Leaves opposite & quite aromatic.
1972 Aug 27th Flowering at Mt Arapiles.
1994 Nov 9th " on Nicola weekend
1995 Jan 15 " " Dargo "

Prostanthera saxicola Slender Mint-bush

1991 Oct 12th Plant growing on Mt Heddrick. Very like P. decussata but leaves slightly incurved. Plant pubescent rather than scabrid. leaves decussate. Buds at leaf bases but not far enough developed to see if calyx-lips of equal length. Leaves on lower branches sparse but at the growing tips quite regular

Prostanthera spinosa Spiny.

1971 Sept 2nd Plant growing at Mt Arapiles.
Plant about 3ft high with conspicuous pungent spines opposite on the branches
leaves small round appx 3mm across
in clusters of 4 around base of spine.
Spines appx. 1 cm long. leaves on stalks,
and quite hairy with white hairs more
dense on undersurface. Stems also hairy.
An unusual looking plant.

Prostanthera walteri Monkey Mint-bush

1989 Sept 16th Plant growing on Mt Elizabeth not in flower
We found it in flower on Mt Elery in January
many years ago.

1990 Jan 8 Flowering at Mt Buffalo in many places
James Turner says this plant has a different name
from the one in East Gippsland. The Census
from herbarium mentions P. monticola + P. walteri.
Flowers appeared less brown, larger, more plentiful.
Leaves appeared different too with flat margins.
& sometimes lobes towards base

1991 Jan 26th Flowering on Tullochs Hrd Road near Cielanlipy.
1999 " 24th " " Cielanlipy weekend.

2003 June This species is divided into 2 species
P. monticola & P. walteri (1984 for P monticola)

Prostanthera

1973 Mch 17 Growing at Serpentine on way to Lake Tali Rhan.
Leaves almost rounded square decussate & very dense at tips of braches □
Leaves covered with crystallike warts - very pretty under microscope
Flowers on specimen singly (& I think axillary but not sure) Calyx I think had unequal lobes. Anther appendages not conspicuous but large black "vessel" I presume anther & little white thick 'hair' below.
Flower deep purple colour.

Proteaceae.

Botany Group.

This family has tepals as petals & sepals are not easily distinguished. There are 45 genera in Australia. Family name is derived from South African genus PROTEA.

Floral Structure: Usually bisexual.

Perianth: Tepals 4 petaloid

Androecium: Stamens 4, sometimes 3, usually epitepalous. (attached to tepals)
Filaments often very short so anthers appear joined to the tepals.

Gynoecium: Carpel 1, ovary superior ovules 1-many.
In many genera the pollen is shed onto the style end or pollen-presenter. Stigmatic area in middle of pollen-presenter, becomes receptive some time after anthesis & when the pollen from that flower is dispersed.

Fruit: Either woody or leathery follicle or a drupe or a small nut.

Shrubs or trees, leaves simple but often lobed or deeply divided or usually stiff & leathery. There are no stipules

Banksia	marginata	$\overline{P_{4}}\ A_{4}\ G_{\underline{1}}$
Grevillea	robusta.	$\overline{P_{4}}\ A_{4}\ G_{\underline{1}}$
	rosmarinifolia	$\overline{P_{(4)}}\ A_{4}\ G_{\underline{1}}$
Hakea	sericea	$P_{4}\ A_{4}\ G_{\underline{1}}$

*Prunella vulgaris — Self-heal.

1972	Jan 30th	Flowering	in Mt Howitt area.
1993	Jan 31	"	" Errinundra N.P.
1994	Oct 28	"	" Tgon Sth Reserve
1995	Apr 12th	Growing	" Drouin Water Reserve -
	Jan 15th	"	" Dargo weekend.
1996	" 20th	"	" Hotham "
1995	Dec 12th	"	" Railway Reserve near Traralgon
1999	Jan 23rd	"	" flowering on Cielantipay weekend.
		Identified from specimen brought back.	
2001	Nov 2	Growing	in Newborough bush.
	Dec 1	"	" " - Sandy Ck.

Pseudanthus divaricatissimus Tangled Beudanthus.

1994 Nov 1st Plant collected at Nicola near camp. Identified by James Turner & John Davies.

Plant has branches going in all directions, very stiff & woody. Leaves orbicular & I think alternate but so dense as to be difficult to be sure. Leaves tiny by app. 2 mm long. Specimen I had branches in one plane.

Pseudanthus (orientalis) ovalifolia

1967 Aug 29th Flowering at Cowwarr. Tiny flowers (yellow) on rigid stems. almost sessile. Flower apparently without petals. Leaves alternate approx 0.5 cm long, deeply ~~gr~~ channelled, broadest at tip.

1968 Oct 13th Flowering at Cowwarr on bank of road. Identified by Mr Marshall.

1970 ~~Jan 2nd~~ Pseudanthus plants have male + female flowers on same plant.

Therefore think above plants may be Phyllanthus thymoides.

1973 May 13th This plant flowering at Rosedale.

Pseudanthus Ovalifolius

Sept 28th 1968 Flowering at the Dutson Down Farm Wildflower reserve. Max found it. little shrub about 8" high. Leaves tiny 3 to 4 mm long with edges curved upwards. Leaves opp & at right angles - yellowish green - very close together as in Thyme.
Flowers in clusters at ends of tiny branches. Branches from 5 mm long. Six petals on at least calyx I believe white. Centre of flower has yellow winged stamens with short brown stigmas around jelly-like centre. Whole flower 5 mm wide Some flowers have 5 petals. Flowers so close together & so tiny it is difficult to be sure of number of petals. Very delicate plant.
Stems brown & woody. Stamens united in 3 pairs; but has 6 stamens if counted this way qp.

1972 Aug 28th Flowering in the Little Desert. Above description fits the specimen. Photographed.

~~1978 May 7th Flowering in Hol~~

Pseudognaphalium luteoalbum

luteo-album

(Gnaphalium ~~luteoalbum~~) (Jersey Cudweed)

1967 Jan 14th flowering opp Waterlily pond, Yallourn Nth.

April 16th " along Clark's Rd.

~~1969~~ Feb 16th " Lime Pit Rd. Rosedale

1987 Sept 24th " at 4-mile Creek. Sent specimen to D. Parson. Tall plant with spreading flowers with no floral leaves.

1994 Oct 28th Plant growing in Tgn Str Reserve.

1995 Dec 12 " " " Railway Reserve near Traralgon

2001 Nov 3 " " Newborough Bush.

Pteridium esculentum — Austral Bracken

1995	Apr 12th	Growing	Drouin Water Reserve
1997	Apr 5th	"	APM Reserve - Grand Ridge Rd.
2000	Dec 3rd	"	Sweetwater Ck. Reserve.
2001	May 27th	"	Newborough bush.
	Dec	"	" Sandy Ck.
2004	Apr 3	"	Colley's Rd. Block.

Pteris tremula — Tender Brake

1967	Apr. 30th	Morwell Nat. Park.
	Dec 23rd	" " "
1969	Mch 29th	Seagasser Rd.
1970	Mch 7th	Warrabah Bay.
1968	Mch 3rd	Tarra Valley Road Reserve.
1970	Nov 23	Lilly-Pilly Gully.
1972	June.	Moonlight Creek
	July.	Billy Goat Bend.

Pterostylis acicularis

2006 Sept 29. Flowering at Mt Heddrick. This species used to be a sub-species of P. rufa Photo on Ralph's CD.

Pterostylis aestiva.

1989 Jan 14th Flowering at Wulgulmerang. Dad photographed. Very like P. decurva but bracts are wider, stand out from stem more + level of tip of uppermost bract ~~shorter than~~ extends beyond the ovary. Galea not as hooded as P. decurva + tip of dorsal sepal pointed outwards, not parallel to flower. Tip of dorsal sepal being about level with thick sinus. Sinus very flat across + labellum visible. Still without careful examination could easily be mistaken for P. decurva

1993 Jan 31 Flowering in Errinundra area in swampy area. Still agree very like P. decurva. James Turner identified.

Pterostylis aestova. 2nd Page Greenhood

1999 Jan 24th Recorded for Gelantipy weekend by I cannot find any reference to this species. I imagine James Turner must have knowledge of it. Put a in front of it and it is in Census Ed.

Pterostylis alata.

2006 Aug 25th flowering at Wilsons Prom (Ralph's CD)

Pterostylis Alpina

1966 Sept 4th Flowering in bush opp. O. Wade's.
lateral sepals recurved at right angles to lower part. Although the labellum protrudes upwards through the sinus it curves forward but does not protrude forwards past the lower part of the lateral sepals. Appendage to labellum quite large.
Scape - 20 cm
Galea - 2·5 cm
Dorsal Sepal - broad & pointed but even all length.
Side Petals - Broader at the centre and almost meeting under dorsal sepal
Points of all three separate giving 3 points to Galea with flanged effect.
Lateral Sepals - 3 cm - 1 cm perpendicular 2 cm horizontal.
Reflexed at right angles across centre of Galea.
Labellum - Broad green, fairly blunt. Bends at top (See above)
Labellum appendage. - 4mm.
Column - 1·5 cm
Sinus - very wide.
Stem bracts - 2 stem-clasping bracts - standing out.
leaves - 2 basal leaves.

1967 Sept. 3rd. Flowering in bush opp. O. Wades
Oct 1st Flowering near bush paddock
Sept 24th " at Blackwarry.
1968 Sept 17th " at Shingle Ck reserve and in bud at A.P.M reserve
22nd Specimens at Shingle Ck reserve very tall 10" or more high.
Oct 13th Flowering at Stoney Ck. Cooawarr.
Dec 22nd In Seed in Morwell National Park.
1969 Aug 16th Flowering at Wilson's Prom.

1969 Oct 19th Flowering at Shingle Ck. Res.
1970 Jan 2nd " " Tamboritha Saddle
24th " " Rocky Plains Wulgulmerang.
These plants were very robust.
Sept 19th Flowering opp. O. Lades.
26th Flowering in area near Chessum Road.
Nov 23rd " at hilly-Pilly Gully.
1971 Jan 17th " in area past Mt Useful.
on Connor Plains Road. lovely
large specimens in a great number.
Jan 30th Flowering at Howitt Springs.
Oct 17th " " O. Lades
1972 Jan 30th " " Mt Howitt.
Feb. " " Mt. St. Ciwinear
1997 Jan 18th " " Livingstone Ck Track + Mt Kugong.
1999 Jan 24th Recorded for Gelantipay weekend.
2006 Sept 30th Flowering at Senenis Track

Pterostylis Alveata

1970 April 26th. Taken to area at Screw Creek by Mr + Mrs Lyndon. P. alveata flowering in the area - along the track and in a bush area just over sand dune.

Scape: 12 cm

Leaf Bracts: 4 app. leaf bracts becoming larger as the ascend the stem. - alternate. lowest on 1cm - top one 2.5 cm. - edges of bracts entire, apex with fine point app. 2mm long. All stem clasping.

Dorsal Sepal: 3 cm long curved app centre. White with green stripes - tapering to fine point but not filiform less than 1 cm wide at base.

Lateral ~~Sepals~~ Petals: 2.8 cm long same color as Dorsal Sepal, sitting very close to dorsal sepal but spreading downwards slightly at apex.

Lateral Sepals: 3cm long - 1.2cm filaperm. These sepals are slightly unusual as they spread over the petals and form a very thick, protruding lip at sinus. These sepals more green than dorsal sepal + petals.

Sinus: Decidely grooved ⌒.

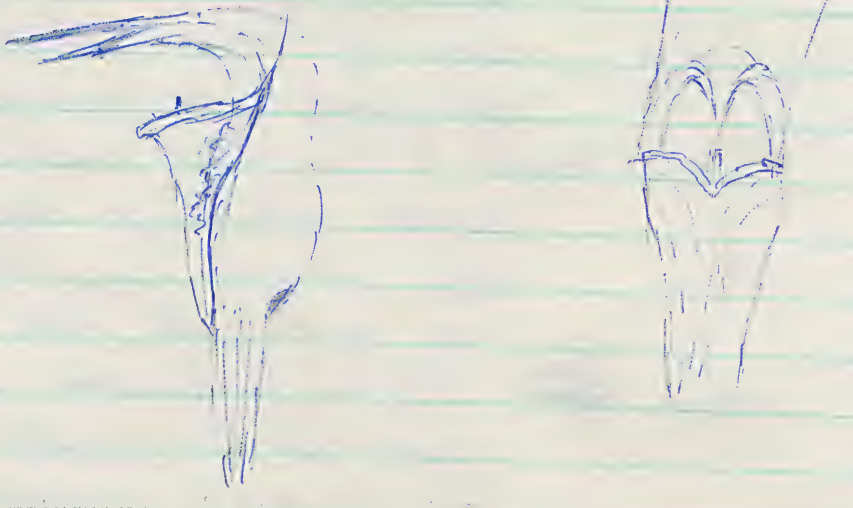
Ovary: 1.3 cm long blueish green, ribbed. Last bract is 2cm below ovary so really no floral bract.

Labellum: 1.5 cm approx. with slight indentation towards the apex. I did not seen any that were bifid, all were blunt but Mrs Lyndon found at least two slightly bifid. Very red colon.

Labellum (cont) Visible above the sinus though not really protruding through it because of thick lip. Taller than column.

Column: Only visible if you look in from above.

leaves: Rosette at side of stalk and plants growing together in colonies. leaves quite pointed though broad & stalked.



1978 April 28th flowering at Screw Creek.

atrans

Pterostylis (obtusa ? Blunt-tongue Greenhood.

1989 Nov. 27th Specimen flowering down track off Red Hill Road. See all details under P. decurva as I identified it wrongly. This form is known from Lakes Entrance way through to Sydney.

1994 Jan 15th Almost finished flowering at car park at Mt. Erica.

1995 Jan 15th Recorded for Dargo weekend

Pterostylis Baptisti

1967 May 1st P Baptisti sent to Miss Galbraith in jar from Queensland. We photographed it out of jar but particulars below were taken after replacing in jar.

Scape:- 14 cm +

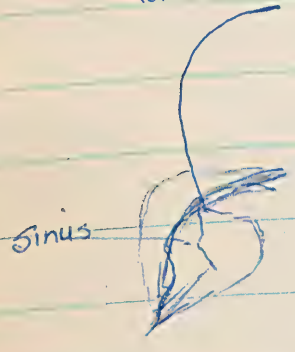
Stem bracts:- stem clasping

Dorsal Sepal:- 6 cm .3cm (3 cm) long & pointed Russet brown from bend. Very dilated at base making it 1 cm each side of centre back.

Mainly white with green stripe down centre back & centre side.

Lateral Petals:- 4 cm - 2 cm each side of bend. White with brown tip. Tips not joined to dorsal sepal for last cm.

Lateral Sepals:- 5 cm long protuding well out at front so that sinus is a complete hole starting at base of lateral petals. 2 sepals joined at bend. Tips of sepals turned towards front of flower.



Front sinus very wide - right angle.

labellum:- Very deep red on top but white underneath, with red stripe. Twisted like Curta. Could not find out how far forward it comes.

Approx 2.5 cm. Appears to have column at height of front sinus, can just see something behind labellum. Looking through flower there is stem going up back inside to hold column. Can't see where labellumn joins. Comes to point rather suddenly. Can't see labellum appendage.

When Miss Galbraith received specimen tongue was quite straight but it showed slight tendency to curve before she gave it to Mrs Collins was quite twisted by the time we received it that night.

Pterostylis rufa / sp. aff biseta

1991 Oct 12th Plant flowering on rocky outcrop with flat surface on Mt Hedrick. Flowers were almost nodding with 6 or more flowers crowded on stalk 5" high.

1999 Jan 24th Recorded as P. aff rufa from Gelantipy weekend. Not sure which this one is. In Flora of Victoria P. cherapila is a larger form & P. aff biseta is recorded for Pink Lakes. I imagine James Turner would have identified P. aff rufa.

Pterostylis chlorogramma

2006 Aug. 8th Flowering at Bunyip – On Ralph's CD you can see the notch at the apex of the turned up end of the labellum. Similar orchid to the Tall Greenhood

Pterostylis Concinna

1966 Flowering in Pine plantation at school. July 3rd.
Flowering at Lakes Entrance June 10th.
" Cochrane's Lane Sept 4th.
1967 " Pine Plantation at School July 27th.
1968 June 9th In bud along Rosedale Rd.
" 20th Flowering from " "

Scape: 15 cm with one flower.
Calea: 3 cm
Dorsal Sepal: 3 cm long (as above) 7mm wide at base 5mm wide at bend and gradually tapering into a fine point. White with green stripes.
Lateral Petals: 2.5 cm long ~~joined for at least 1 cm~~. 5mm wide at widest point and tapering suddenly to point. Half the top of the petal is under the dorsal sepal + point does not reach as far. Effect is a flanged effect. Green striped with darker green and more curved than dorsal sepal so that points are lower.

Lateral Sepals: 3 cm long joined for at least 1 cm. Last 1.5 cm very fine erect + tips enclined to point backwards. Green but final 5mm brown, with 2 darker green stripes. Edge of sinus very dark green. Sinus very wide ( ) and sepals slightly spreading at top.
Labellum: Approx 1 cm long, dark color with bifid tongue Approx 2mm wide + V approx 1mm deep (quite pronounced through sinus). Straight + not protruding
Column: Shorter than labellum therefore not visible

Ovary: .9cm fringed with brown, ribbed.
Stem bracts: 2 completely surrounding stem, top one all stem clasping but bottom one standing out at top. Top one 1.5 cm long & bottom one 2cm long, light green almost transparent.
leaves. 3 to rosette. Dark green, mid vein very deep, side veins risen. Very smooth & shiny underneath. 2.5 cm long & 1.5 cm wide with stem .5 cm long. leaf ending in fine point.

1968 July 21st Flowering along Cochrane's lane.
1969 Aug 29th " at Providence Ponds
1970 Sept 14th " at Dutson Down Road area in △ area.
1971 Aug 29th Flowering throughout the Grampians.
22nd " in Lakes National Park - Loch Sport.
1972 Aug 29th " in Grampians.
1973 July 1st " in profusion near outfall sewer at Rosedale also flowering week before.
1978 May 9th Buds formed but not mature in Holey Plains S.P.
1990 July 22 Flowering in natural bushland in pine area between Cormandale & Rosedale.
1991 Oct 12th Flowering on Mt Heddrick
~~2002 Nov 23rd Recorded in Holey Plains State Park.~~
2006 July 30 Flowering at McLaughlans Beach.

Pterostylis cucullata

1969 Aug 16th Flowering on sand dunes at Wilson's Prom.
Scape :- 15 cm.
No basal leaves.
Stem leaves :- 5 only 4 ins long ¼" wide. Final leaf acts as bract from below ovary & up past the flower.
Galea :- 1½ ins
Dorsal Sepal :- Ending in sharp point, mostly green brown at tip. Point very abrupt.
lateral Petals :- Almost brown, reaching to within ⅛" of dorsal sepal and very close to it.
lateral Sepals :- Cut at 45° then up fairly straight. Sepals fairly thick, hairy round curve, not much higher than the galea. Short & thick - fairly blunt point, curved slightly over the galea.
Sinus :- 75° very brown from front.
labellum :- broad & blunt, dark brown, just tip shows through sinus — very irritable.
One flower was light brown — the other one was burgundy.
Wide space between lateral petals & sepals - something like P. ~~Barbata~~ Baptistii
Sept 4th Found 4 more flowers in full bloom.
1970 Oct 8th Miss Galbraith reports plants flowering during last week at Prom.
1994 Nov 9th Many plants flowering in hicola area between the second bridge over the Wellington & the Welaoa camp. Also along the Barcley River. These plants were very tall compared with the plants we had seen at the prom. These scapes would be 9" or more.

Prerostylis Curta.

1966 Flowering August 21st above our track.
Found in reserve for first time. Color of tongue very pronounced - dark stripe in center & lighter brown on either side.

3rd Sept- Beautiful specimens in bush opp. O. Lade's
Scape - 19 cm
Galea - 2.5 cm very blunt.
Dorsal Sepal - pointed
Side Petals - Edge to edge with dorsal sepal giving flanged blunt effect.
Lateral Sepals. not exceeding galea.
Labellum - hairy, wide, twisted - not tapering.
Labellum appendage - approx 5 mm.
Column - 18 mm.
Sinus - very wide.
Stem bracts - 2 completely clasping stem as not to be noticeable.
Leaves - 2 basal leaves. with stems.

1969 August 13th First flowers opp. Mrs. O. Lade's.
Sept 3 Still flowering opp. Mrs. O. Lade's. Large leaf variety only in bud yet.
24th Flowering Calignee 5th Rd

1968 July 21st Found leaves 4" long along Cochranes land.
Aug 11th Flowering past Shingle Ck.
Sept 22nd Beautiful specimens at Shingle Ck reserve some 15" high. Found five double-headed flowers in one clump + more further over. All flowers were complete as far as we could tell without destroying them.

1968	Oct 20th	Still flowering at Shingle Ck Reserve.
1969	Oct 19th	Flowering at Shingle Ck. Reserve.
1970	Aug. 9.	" in A.P.M. Reserve.
	Sept 13	" " ~~Tgon Sth Res.~~ Opp. O. Lades
		Also found variegated leaves on cutta plants.
	Sept 19.	Flowering opp. O. Lades
1971	Sept 1.	" in the Grampians
	Oct 19th	" at O. Lades.
	24th	" at Reid's Corner,
1973	Dec 4th	" " APM reserve & track.
1994	Nov 26th	" " " block Stradbroke Sth. Opp. H'way
1997	Apr 5th	Just leaves in APM Reserve – Grand Ridge Rd.
2001	Nov 3	Growing in Nowhereough Bush.

Pterostylis cycnocephala (Swan)

1970. Jan 2nd Flowering at Tamburetha Saddle.

Only found the one specimen.

Scape: 11 cm with 5 flowers + 4 stem bracts. The stem bracts almost same colour as stem - a very pale almost cream, and stem clasping right around.

Leaves: Withered at flowering time. About 1.5 cm long & up to 1.5 cm wide, tapering to blunt point. Only remants of 3 leaves visible.

Dorsal Sepal: Appr. 7 mm coming to blunt point, continues in line with ovary.

Lateral Petals: Joined to dorsal sepal making the galea very deep.

Lateral Sepals: Deflexed 2.5 cm wide & 5 mm long giving the appearance of a circular bottom lip. The tips of the sepals are pointed but not noticeably so as they are so small. Sepals are joined almost to the tip & has a cup like appearance because of concave curve.

Labellum: Appr 3 mm long on long stalk & 3 mm wide with rounded tip. At base of labellum is dark green triangle that points to the apex of labellum.

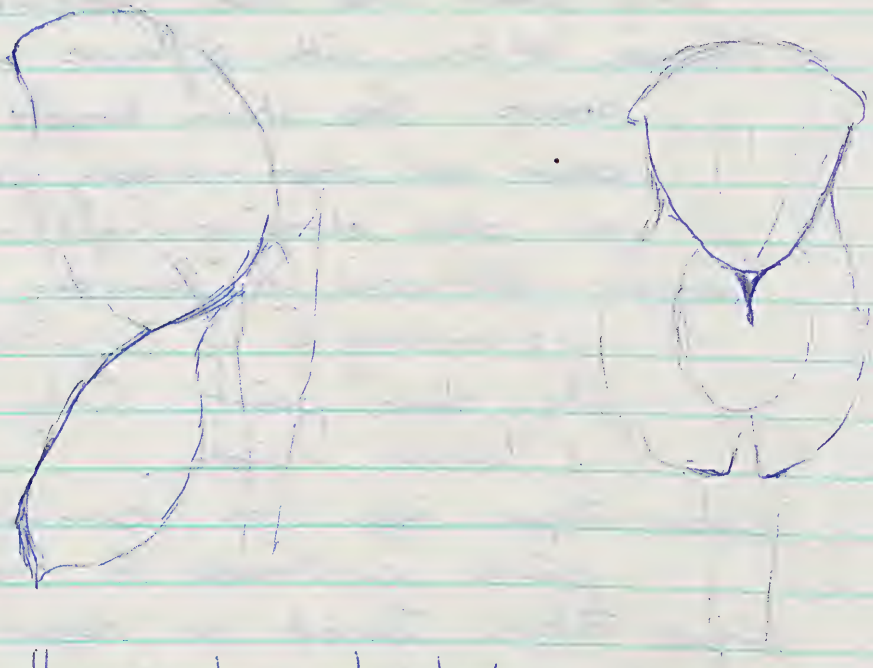
Column: Curves round under galea & tip is at point of galea.

Ovary: Appr 7 mm long and twisted around stem.

Whole flower very curved with dark green stripes & rest green.

Labellum very sensitive.

Each flower has stem bract.



Whole flowers has twisted appearance as the ovary comes across in front of the stem + the flowers are all facing different ways.

1970 Jan 24th flowering at Rocky Plains, Wulgulmerang.
1971 Jan 30th " " Hawitt Plains and on the Mt Hawitt Hike. Labellum appendage appears to have a second section coming from it and viewed from side is very like swan's head.

Had had nine flowers on the stalk though only 3 still in bloom. lovely robust plants.

1972 Jan 30th flowering at Hawitt Plains
1973 Sept 5th " near Lake Eppalock – Bendigo.
1995 Jan 15th " on snow plain near King's Lookout on Dargo weekend
1996 " 30 Ditto
1997 " 18th flowering at Mt. Baldhead.

Pterostylis decurva. (Summer)

1970 Jan 18th Flowering at Tamburetha Saddle.

Scape: 33 cm 4 stem bracts deminishing in size from the top to the bottom. Top one 3 cm - bottom one 5mm, all stem clasping, spreading from the stem and tapering to a fine point.

Leaves: Stalked ovate-lanceolate, dried at time of flowering. Rosette near base of scape - approx 3.

Dorsal Sepal: 6 cm - final 2.5 cm filiform point. White with green stripes 1 cm wide at base. - 2 cm top of Galea, then curving over gently to almost semi-circle with tip curved inwards. Filiform point brown.

Lateral Petals: 3.5 - 2 cm up then gentle curve crossing. along the Dorsal Sepal then spreading. Green white but last cm brown.

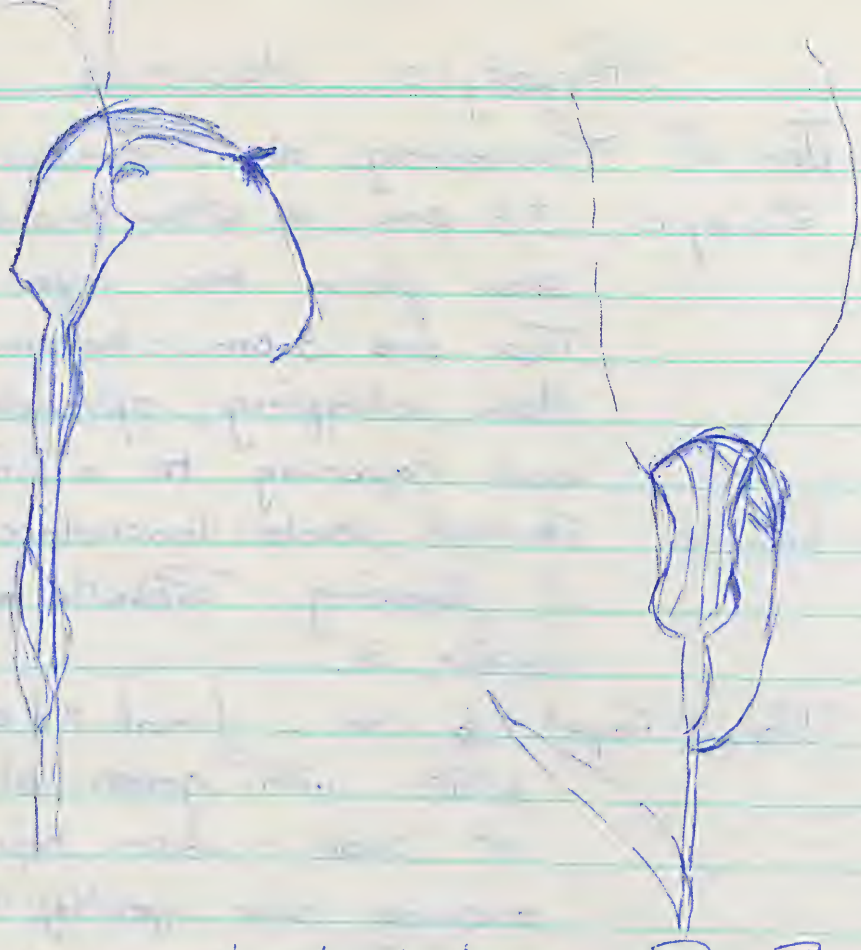
Lateral Sepals: 6 cm - last 4.5 cm filiform. Green with last 2 cm brown. Erect for 4 cm but last 2 cm curving sometimes outwards but sometimes backwards sometimes straight.

Sinus: Thick lip around edge but sinus almost straight except for small indentation.

Labellum: Approx. 2 cm bright red strap like with small club at tip. Fairly sensitive. Protruding through sinus although high up.

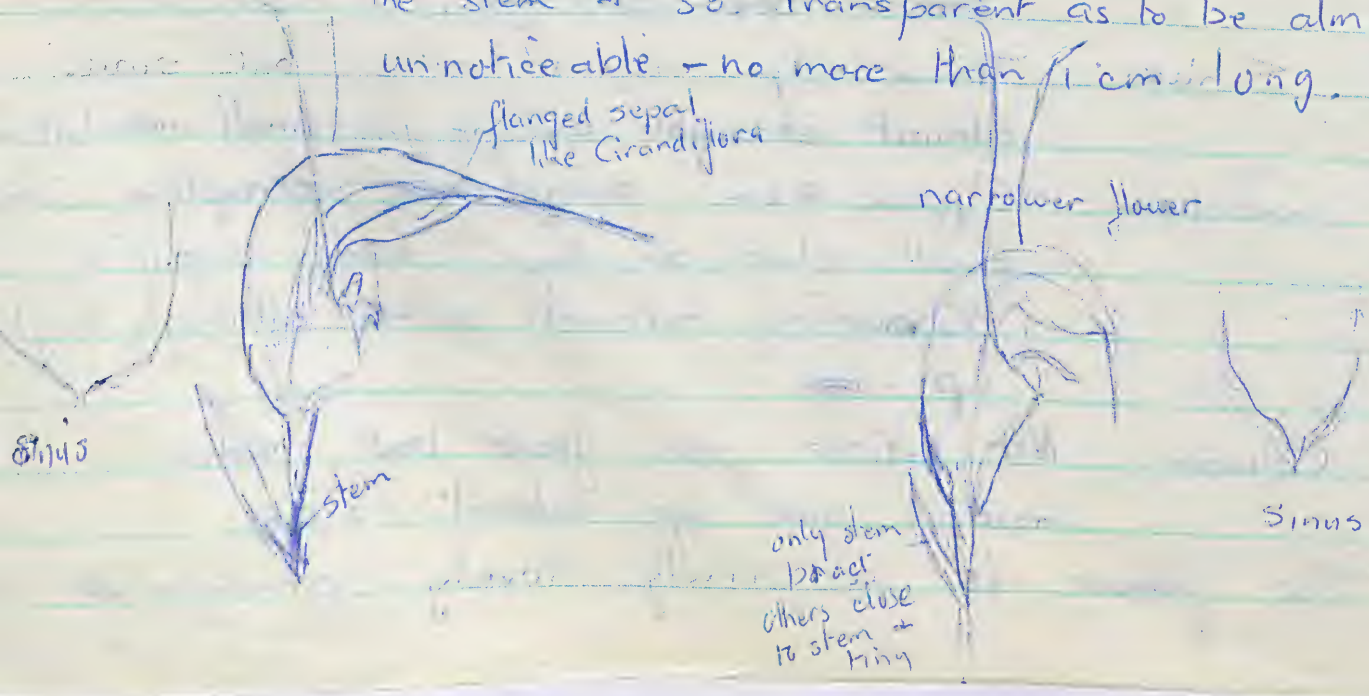
Column: Not visible from front but shadow inside goes up about 1.5 cm.

The flower is a truly lovely greenhood.



Jan 24th Flowering at Wulgulmerang, Rocky Plains, & the Cobberas.

Jan 31st Flowering near Airfield near Mt Howitt. Also specimen from further back along road. One specimen like one above described except that filaform point is not so curved over but other specimen while being more curved - with longer labellum, has no stem leaves except tiny one clasping the stem - so transparent as to be almost unnoticeable - no more than 1 cm long.



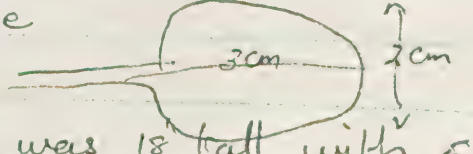
Pterostylis decurva (cont)

1972 Jan. 30th Flowering near Aerodrome on way home from Mr Howitt. Two specimens were collected about 1 mile apart. The first had a beautifully curved galea with dorsal sepal ending in a long fine point while other specimen had dorsal sepal straight out in front. Cirticle in L.V. Naturalist page 7 April 1972.

1976 Jan. 10th Flowering at Mt Useful. Specimens were like the lower illustration, with filiform of dorsal sepal was straight out not curved down but it was only freshly opened. It may have turned down after it had been open for a time.

1989 Jan 14th Flowering at Wulgulmerang – photographed.

1989 Nov 27th Specimen flowering down track off Red Hill Road after end of bitumen. Not certain of identification as it is not the usual form of P. decurva However Nichols has a drawing from Barrington Tops, N.S.W. which is very similar to T'gon 5th specimen but the tongue on our specimen was shorter & the dorsal sepal was not as long in the filiform section. Most of the tongues were back hiding the column which had 2 dark spots on it. There were only 4 specimens that Brendan found. heaves of rosette (4) near flowering stalk were ovate into a blunt point with stalk almost as long as leaf blade



Flower was 18 tall with 5-6 bract leaflike and fine pointed. Galea was ¾", narrow whitish striped with green. lateral sepals extended past galea about ½ length of galea & were spreading as they went

Dorsal sepals dilated + brownish like P. grandiflora but only half as dilated. Sinus with thick lip + some part extruding outwards below sinus. Sinus almost straight across. Labellum about size of sinus in height, very rounded at apex and dark in colour. When back labellum hides column ∴ labellum must be longer than column.

We are hoping these specimens are lowland forms of this orchid.

This orchid is identified by David Jones as a form of P. obtusa. which is known from Gippsland to Sydney.

Information from Ruth Clark & and Brenden Hacken.

1993 Jan 31 Flowering in drier area in Errinundra area.
2006 " 8th " . Tronga Road (Ralph's CP)

(furcata). falcata.

Pterostylis (Falcata.)

1966 Oct 3rd Flowering on bush opposite O. Lades.
Only 2 flowers fully developed. Many flowers later.
Scape 15"
Galea 5" cm - semi circular. Base of galea very square or lobed
Dorsal Sepal - 9 cm protruding 2 cm past lateral petals giving filiform effect.
Lateral Petals. Even throughout except at end - suddenly pointed.
Lateral Sepals - 3 cm long - tapering point: 5 cm. Erect As flower ages sepals tend to cross over galea.
Sinus - less than 90° rather narrow.
Labellum - 3 cm slightly curving.
Labellum appendage - 5 mm.
Column - 2 cm shorter than labellum
Stem bracts - well developed - spreading - clasping stem where attached - approx 3 bracts.
Leaves - two large light green basal leaves.
1967 Jan 14th Found seed box, hope it was Falcata at end of pool at Anderson's Track.
This orchid is also in Traralgon 3th Reserve in the swamp area. Went to plant some plants from A.P.M property into reserve and found some flowering.
Oct 22nd Flowering opp. O. Lades.
1968 Oct 4th " " " lovely big specimens more than 2" each way.
Mrs Carr reports P. falcata flowering at Andersons Track in November + still some plants flowering 11th Jan 1968.
Oct 20th Still flowering at Shingle Ck Reserve.
Nov 17th " " " "

1969	Oct 19th	Flowering at Shingle Ck. Res. Almost flowering.
1970	Jan 24th	Flowering at Wulgulmerang.
	Oct 17th	Plants showing opp. O. Lades
1991	Jan 26th	Flowering near Tulloch And Road near Gelantipay
1994	Nov 26	" " in APM block Stradbroke Sth Gipp. Hway.
1999	Jan 24th	" " Gelantipay weekend.
2003	June	Name change in 2nd ed. of Census.

Prerostylis Fishii

Found Clark's Road. 1965 in flower late June approx 22nd.
later found Cochrane's lane same year.
1966 Approached Council to preserve top side of road.
Council aggreed.
1966 Fishii in flower April 25th.
1969 Apr. 30th. Fishii leaves fully developed and several buds forming.
May 14th Fishii flowering but very small narrow flowers. Some buds did not develop.
These were all on Clark's Rd.
On Cochranes lane no leaves found on Apr 30th
But on May 14th found about 8 spent flowers.
This means leaves + flowers had come up + flowered in the fortnight. We found a couple of very poor flowers + one really good flower.
lots of leaves along road, healthiest near fence.
May 19th Mr Peterson reports bulbs ~~plants~~ Mr Muir took to Herbarium last year have flowered this year.
Aug 6th leaves have come up & are well developed.
Even in the area that was sererely burnt leaves are appearing.
Sept 28 Shire erected fence around Fishii.
1968 Apr. 27 Flowering along Clark's Rd.
May 4. " " Cochrane's lane.
Scape: 14 cm to top of lateral sepal. 3 stem bracts very stem clasping + turned out at point. 12 cm long.
Dorsal Sepal: 4 cm long. - 2 cm to bend 1 cm after bend 1 cm filiform point. almost horizontal. White with thin green stripes, no brown but dark green near lateral sepals.

Lateral Petals: 2·7 cm long - 2 cm to bend · 7 after bend.

White at bottom through green to real brown. 4 mm at widest part after bend coming to very fine short point.

Lateral Sepals: 3·2 cm long - united for 1·5 cm. Sinus so wide as to be almost round. Two sepal tops. 1 cm wide at widest part & ·5 cm between at sinus. Filiform points 1·5 cm long, erect, diverging & last ·5 cm very diverging. White at bottom, green striped at sinus & brown last cm of filiform.

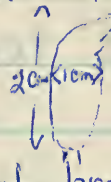
Labellum: 1 cm long not visible through sinus but just below. White with dark brown edge towards point & almost black point. Irritable.

Column: 1 cm - just at top of labellum but very long wings (·5 long), broad at top & narrowing down.

Ovary: ·5 cm long, ribbed & striped.

Leaves: Not at base of scape. 4 to 8 in arosette. 1·5 cm long with ·5 cm stalk. 1 cm wide with finely serrated edge like nutans. Very pointed & main vein very prominent for ¾ of length of leaf.

When flower in bud lateral sepals and dorsal sepal all together & horizontal



Taller plant & leaf bracts 1·5 cm long. Flower correspondingly increased in size 2·2 cm to bend & 2·2 cm after bend. Lateral sepals 4 cm long & filiform point at 45° angle from horizontal. Not every flower had filiform point. Could they have been eaten off or were they broken off perhaps by wind knocking them against grass & ferns. Saw one flower with point broken & hanging down.

Pterostylis Fischii (cont)

1968 May 25th Fischii still flowering along Cochrane's lane. Max found 2 large clumps of Fischii in A.P.M property in gully at edge of Pines just back from fire break at Cochrane's turn off. One clump had 2 flowers but the other had 25 beautiful flowers. We have never seen such robust flowers. Does this mean the plants appreciated the shelter of the pines. There was one plant with a flower and a bud on the one stalk. These specimens were green + white striped with the flange at the top of gaka brown. They were lovely plump flowers. Will try to preserve the plants somehow. Leaves so close together they were overlapping.

June 16th. Still flowering along Cochrane's Lane.

July 7th Found beautiful big flower in APM gully. Was hidden under ferns. Beautiful brown + green coloring + dorsal sepal with very long filiform point. Lateral sepals also very long. All the flowers in the patch found earlier had been eaten off except one which had gone to seed. Today we found 7 different areas all in the vicinity of the wattle tree. Some quite a way up but further up we could not find any evidence at all.

July 21st Above flower almost spent. Also found clump of leaves possibly fischii in amongst pines.

1969 Mch 30th four buds developed up very thin, in area near pines. Most leaves only

size of pin head yet.

April 14th One flower in full bloom. two buds + one stem eaten off. Feel 2 of the original buds were eaten + two buds now have come up since.

April 28th Two flowers open near pines. I feel that more plants have come up this year in this area. One more bud up. Plants along roadside coming up. Saw ~~x~~ 5 flowers today and about 4 buds. Plants near fence had one flower with usual (for this spot) rust color on tip of flower while plants near tree only a yard away had dark brown like Grandiflora; while plants near pines had light brown to green. Stems grow round obstructions ~~a~~ if stem lays on ground last inch will rise with flower.

Mr Muir reports 2 buds on his plants.

Aug 20th Miss Galbraith reports fishii has been found in Queensland.

1970 April 19th One flower in bloom and a few buds does not look like good year.

April 26th Sixteen flowers in bloom + ~~more~~ some buds up on Clark's Road. This flowering is the opposite to last year when Cochrane's lane rather than Clark's Road had a great many flowers. Is the theory that orchids flower every second, perhaps correct as the weather in the two places is very similar.

1973 April 2nd Flowering at Tyen 5th.

Pterostylis fischii (cont)

1989 April 15th Flowering in plot transferred to Tgan Sth Flora & Fauna reserve. Brendan reported flowering at Woodside - at least 12 flowers

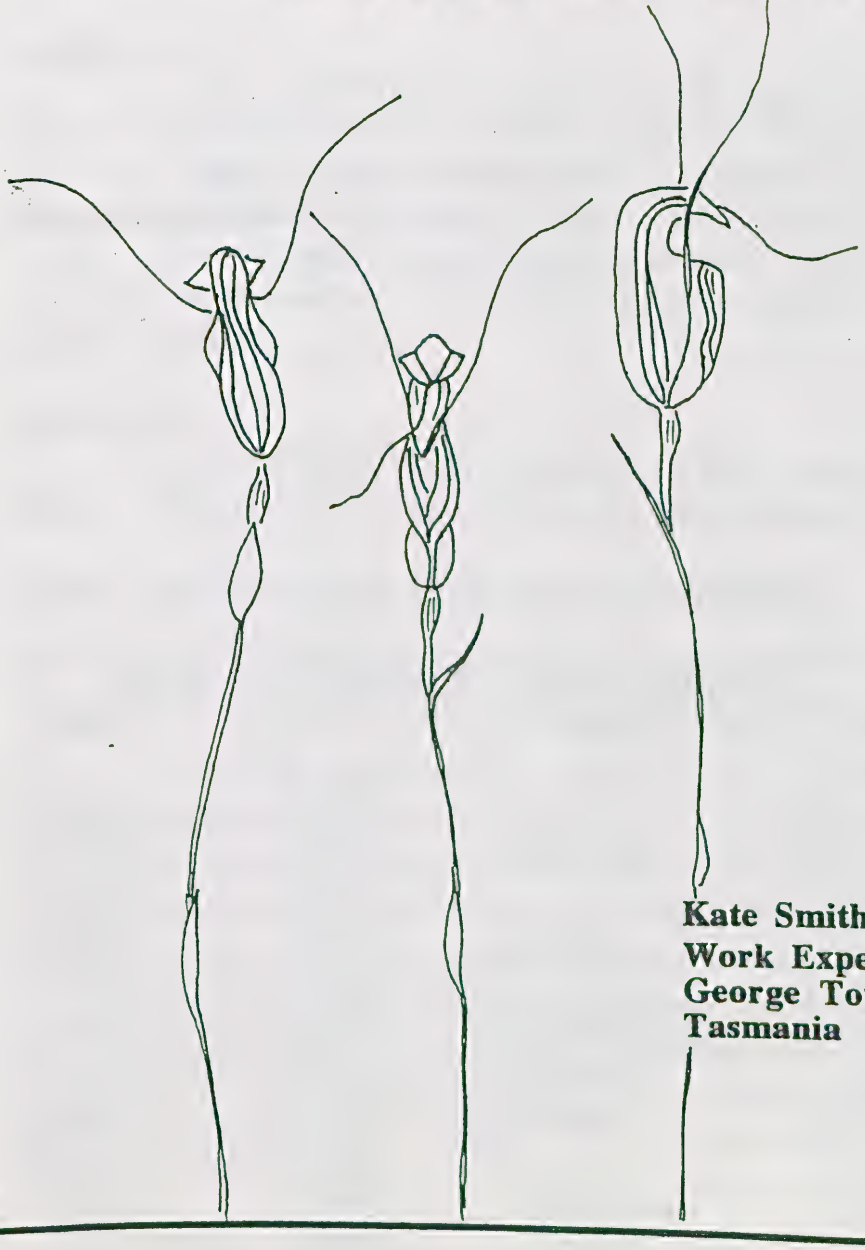
1989 May 7th 150 flowers at least in paddock at Willung.

1990 July 29th Area of P. fischii leaves & one spent flower in lot 213a Parish of Rosedale. Sent specimen to Neville Parsons for identification

FISCH'S GREENHOOD

(*Pterostylis fischii*)

in Yarram District, 1994.



Kate Smith
Work Experience Student
George Town High School
Tasmania

INTRODUCTION :

The Fisch's or Winter Greenhood was discovered by the Fisch family in 1949 at Woodside, 10 miles east of Yarram. This delicate orchid is distributed throughout South-Eastern Queensland, New South Wales and Eastern Victoria (Jones, 1988). The Fisch's Greenhood grows in colonies amongst grass and rocks on gentle, sandy slopes in open forest areas. Fisch's Greenhood is classed as a rare species in Victoria (Gullan, Cheal & Walsh, 1990). The flowering season is from autumn through to winter, hereby giving this orchid the common name of Winter Greenhood. Fisch's Greenhood is a distinctive plant, having a narrow green flower with white stripes and a long brown nose. The stem has up to five bracts and sprouts from a rosette of slightly pointed, oval leaves (Jones, 1988).

There are two known areas of Fisch's Greenhood in the Yarram District, in the Won Wron State Forest and the Woodside Flora Reserve.

AIM

To determine the number of plants in known colonies of Fisch's Greenhood in the Yarram District.

METHOD :

An area in the Won Wron State Forest known to harbour this greenhood species was examined (May 28 1994) to determine if the plant could still be found in that area. When a colony was discovered, the number of plants found was recorded along with the number of plants in flower, bud or in seed. Also recorded were the aspects of the site and the surrounding vegetation. Also under inspection was the Woodside Flora Reserve. In this park, the same process was carried out with the results recorded.

RESULTS :

The results of the count carried out in Won Wron State Forest are shown in Table 1. Ten colonies were found in an area approximately 18 m x 4.m..

Table 1 : Results of count in Won Wron State Forest

Colony	Vegetative	Flower, Seed, Bud	Notes
Patch 1	34	2 Flowers, 1 Seed	Very thick leaf litter, very sheltered
Patch 2	250+		dry sclerophyll forest
Patch 3	100+	2 Flowers	dry sclerophyll forest
Patch 4	50+		thick leaf litter
Patch 5	50+	1 Bud	dry sclerophyll forest
Patch 6	30+		wombat scats
Patch 7	100+	9 Flowers 2 Seed	dry sclerophyll forest
Patch 8	100+	1 Flower	dry sclerophyll forest
Patch 9	20+	1 Flower	dry sclerophyll forest
Patch 10	30+		dry sclerophyll forest
Total = 10 Colonies	764+ plants	15 Flowers, 3 Seeded, 1 Bud	dry sclerophyll forest with a thick leaf litter.

These colonies were all situated on a gentle, west facing slope. The surrounding open forest over-storey was of Yellow Stringy Bark *(Eucalyptus muellerana)*, with an undercover of Bracken *(Pteridum esculentum)*. All the colonies were open to the elements. The surface soil was of a sandy texture with many ant mounds and covered with a thick leaf litter.

The results of counts at Woodside, are listed in Table 2. The terrain of this area is similar to the Won Wron State Forest with a sandy soil, dominated by Bracken undergrowth, many ant colonies and a gentle, sheltered, east facing slope. The canopy was of Yellow String Bark *(Eucalyptus muellerana)*. The colonies were approximately 1m x 2m in diameter and 10 metres away from each other.

Table 2 : Results of counts at Woodside Flora Reserve.

Colony	Vegetative	Flower, Seed, Bud	Notes
Colony 1	368+	13 flowers	signs of Kangaroo and
Colony 2	60+	1 flower	Wallaby disturbance
Totals = 2 Colonies	428 + plants	14 Flowers	Flower stalks chewed by mammals.

Previous statistics show that the Fisch's Greenhood has been found at the Woodside Flora Reserve and Won Wron State Forest since 1981 by T. Allen *(pers. comm.)*.

Maps of the relevant areas are listed in Appendix 1 and associated vegetation species are listed in Appendix 2.

CONCLUSIONS AND RECOMMENDATIONS

Although Fisch's Greenhood is surviving well in both areas, despite signs of possible grazing by wombat, kangaroo and wallaby, and a low flowering rate. It is highly restricted in distribution and is therefore vulnerable to destruction. It would be in the best interests if a count of the Fisch's Greenhood at the relevant sites was to be held annually and the sites protected from accidental clearing.

ACKNOWLEDGMENTS :

The author gratefully acknowledges the assistance of Terri Allen in providing information on sites and her help with the counts.

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Appendix 2 :Vegetation species found at Green Lane, Won Wron State Forest and the Woodside Flora Reserve, surrounding the colonies of *Pterostylis fischii*.

Nomenclature in this report follows Ross (1993)

Acacia paradoxa	Hedge Wattle
Acianthus exsertus	Mosquito Orchid
Acianthus pusillus	Gnat Orchid
Astroloma humifusum	Cranberry Heath
Bossiaea cinerea	Showy Bossiaea
Caladenia sp.	Caladenia
Caladenia carnea	Pink Fingers
Cassinia aculeata	Dogwood
Correa reflexa	Common Correa
Cyrtostylis reniformis	Mosquito Orchid
Drosera planchonii	Climbing Sundew
Eriochilus cucullatus	Parsons Bands
Eucalyptus muellerana	Yellow Stringy Bark
Gahnia sp.	Sedge
Glossodia major	Waxlip
Glycine clandestina	Twining Glycine
Haloragis elata	Raspwort
Hardenbergia violaceae	Sarsaparilla
Hydrocotyle laxiflora	Stinking Pennywort
Hypericum perforatum	St. John's Wort
Kennedya prostrata	Running Postman
Pimelea sp.	Dwarf Rice Flower
Pteridum esculentum	Bracken Fern
Pterostylis concinna	Trim Greenhood
Pterostylis fischii	Winter Greenhood
Pterostylis grandiflora	Cobra Greenhood
Pterostylis longifolia	Tall Greenhood
Pterostylis nana	Dwarf Greenhood
Pterostylis parviflora	Tiny Greenhood
Stackhousia monogyna	Creamy Candles
Thelymitra ixiodes	Spotted Sun Orchid
Veronica sp.	Speedwell
Wahlenbergia sp	Bluebell

MONITORING OF *PTEROSTYLIS FISCHII* IN SOUTH GIPPSLAND DISTRICT, 1995

Counts of the two known populations of *Pterostylis fischii* in South Gippsland District of CNR were conducted on 11/6/95. The counts were done by Terri Allen (volunteer) and Susan Taylor.

Table 1: Results of count in Won Wron State Forest

Colony	Vegetative	Flower, Seed, Bud	Total
Patch 1	184	7 flowers	191
Patch 2	45	0	45
Patch 3	20	0	20
Patch 4	315	1 flower	316
Patch 5	40	2 seeding	42
Patch 6	125	7 flowers	132
Patch 7	150	15* flowers	165
Patch 8	30	1 seeding	31
Total = 8 colonies	909 rosettes	30 flowers 3 seeding	942 plants

* three of these flowers were eaten off.

Table 2: Results of count in Woodside Flora Reserve

Colony	Vegetative	Flower, Seed, Bud	Total
Colonies 1 and 2	459	8* flowers, 3 seeding	456
Total = 2 colonies	459	8 flowers, 3 seeding	456

* four of these flowers were eaten off.

Table 3: Totals of 1994 and 1995 counts in Won Wron State Forest

Year	No. of colonies counted	Vegetative	Flower, Seed, Bud	Total
1994	10	764+	19	783+
1995	8	909	33	942

Table 4: Totals of 1994 and 1995 counts in Woodside Flora Reserve

Year	No. of colonies counted	Vegetative	Flower, Seed, Bud	Total
1994	2	428+	14	442
1995	2	445	11	456

24 Kameruka Road
Northbridge, N.S.W.

21.6.49.

Dear Mrs. Fisch,

Your letter of the 15th, with its enclosure, came some days ago; but between an attack of asthma, terrific rains, and the general disorganisation of life due to gas and power cuts, I was not able to get in to the Herbarium to compare your Pterostylis with other specimens, until this morning.

It is a very interesting form, and in view of the fact that you found two scattered colonies, and not merely an isolated individual, I am of opinion that it is an undescribed species. It is decidedly NOT P.obtusa, to which it bears very little resemblance. It is closer to P.alata; but I cannot reconcile it with any of the numerous specimens of that species in our Herbarium. Two important features seem to distinguish it clearly; (1) the long filiform point of the dorsal sepal, (2) the emarginate or "nicked" tip of the labellum. If you have any more specimens, I should like to know whether these two features are constant. The angle formed by the bend of the lower sepals also appears to be quite different from that in P.alata, although the distortion due to pressing makes it a little difficult to be sure of this. The stem-leaves are more consistently diminutive & bract-like than is usual in alata. The affinities of your plant seem to me to be chiefly with alata, Toveyana, and pulchella; but I cannot say that I would include it in any of these. Have you shown it to Mr. Nicholls ?

Our specimens of alata are from various localities in Victoria, S.Australia, and Tasmania. None of them have much resemblance to your specimen. (Fitzgerald's P.striata from southern N.S.W. is generally accepted as identical with alata; but no specimens are available, and I have never seen a N.S.W. plant.) P.pulchella, only recorded from the Fitzroy and Belmore Falls in the Moss Vale area, agrees with your description of colour and superficial resemblance to P.grandiflora; but the "lip" of the lower sepals protrudes more, and the stem-leaves are not bract-like. P.Toveyana you probably know.

If more material can be had, and if it agrees with the specimen you sent me, I think we should be fully warranted in according your plant specific rank.

I am very pleased to hear of your success with Epidendrum O'Brienanum. You may be interested to know that some time ago I was given a plant of each of its "parents"---E. radicans and E. evectum. They are growing fairly well, but they have not the vigour or stamina of their offspring; at all events not here.

With kind regards,

Yours sincerely

H.M.R.Rupp

24 Kamaratka [illegible]
Northridge, [illegible]
[illegible]

Dear [illegible] Please excuse pencil. I have been laid up for nearly a month — first with bronchial influenza, then with inflammation of the liver. I am on the mend now, but [illegible] allowed up yet, & quite incapable of any ordinary work! Thank you so much for your letter and the beautiful specimen of the Pterostylis. I thought it might last till I was allowed up, but this morning I had to ask my wife to press it. I think you [illegible] Mr. Nicholls deal with it, but you can tell him that [illegible] think it is a new species. I am afraid I can't write more just now. With [illegible] regards

Yours sincerely

J. [illegible]

30.7.49.

24 Kameruka Road
Northbridge, N.S.W.

Dear Mrs. Fisch,

Thank you for your letter and the additional splendid specimen of the Woodside Pterostylis. I have been ill, and am still a long way from normal, so please excuse a brief note. As soon as I am fit I will go more thoroughly into the question of the identity of this interesting Greenhood---your latest specimen seems to me to run very close to P.decurva. But I won't express any definite opinion at the moment, as I cannot undertake anything requiring concentration of brain work ! I am slowly on the mend, and if we get any decent weather I should soon pick up again. It will be good to have Mr. Nicholls's opinion on your Greenhood.

With kind regards,

Yours sincerely

H M R Rupp

36 Ballarat Road
Footscray. W.11
12/6/1960

Mr. Paul Fisch
Doncaster

Dear Mr. Fisch

This is a letter of explanation! When I first suggested to you that maybe I would accompany you on your expedition in the search for the presumed new Greenhood, which you discovered in Gippsland last year - during the Month of May. I imagined the locality of this find was somewhere near Moe or in some district close by. I had not thought it to be so far away as it really is. In fact I thought it would be a one day journey. It's my fault in not giving the matter due thought.

It would be impossible for me to absent myself for a long period, as I am at present engaged on the completing of the initial Portion of my Magnum Opus. The Orchids of Australia which is for the moment very urgent; because the Printers are waiting for it! Keys to Genera et species are in the making and this takes a considerable amount of my spare time - However, I hope you do find the greenhood and have the very best of wishes for Mrs Nicholls & myself for a Grand Holiday

Kindest Regards, Sincerely Yours M. Nicholls.

35 Ballarat Rd
Footscray, Wi[illegible]
24-5-1950

To Mr. P. Fisch

Dear Mr Fisch

The Pterostylis specimens opened up in perfect condition. As it represents an entirely New species I would appreciate any data of the environment such as soil & surrounds & whether of a gregarious habit or growing singly here & there — (Gugeanum as you know is the habit of growing in masses) I have decided to name it in your honour so it will be Pterostylis Fischii (species new.) for you have done a considerable amount of work in connection with our Botany — Congratulations!

Do you know where Prasophyllum pyriforme Coleman grows? Mrs Coleman wrote to me — saying that you may be able to secure a few specimens next spring.

Sincerely yours
in haste
T. A. Mitchell

25th 5-1950

Dear Mr Nicholls

I received your letter of 2[illegible]-5-50 today for which I thank you very much. The whole family is delighted with the News of having found an undescribed Green [illegible]

Of course I feel very honored to have this orchid named Perostylis Fischii, but ~~If I am sure there I would be Botanists, more worthy of the honor I think to give it a more descriptive name would be more satisfactory.~~

As for the description of the locality of our find: The orchid is growing in a very much scattered colony from singly or in groups of up to four or five together (Somewhat of the same growing habit of P. revoluta); The soil I should term a sandy loam, well drained overlaying quartz gravel.

→ in fairly light forest country, slightly undulating. The colony (one only) we found is on a small rise where there was no undergrowth exept brackenfern.

I am not familiar with Prasophyllum pyriforme Colman, but am ~~[illegible]~~ interested and keen to learn more of its growing locality.

When my wife and two of our daughters went with the specimens to the Herbarium Mr. Willis was found enough to show them some of your original painting. The ladies regarded that as a real treat and keep on praising your wonderful work.

Sincerely yours

To Mr. P. Fisch.
Leeds Road.
Doncaster.

35 Ballarat Road.
Footscray, W.11.
5/8/1949

(? or was it Mrs Fisch?)

Dear Mr. Fisch

Mr. J.H. Willis forwarded to me a specimen of a Greenhood (Pterostylis) which you? collected in Gippsland.

Mr. Willis wanted my opinion, incidentally the Rev. Mr. Rupp of North Bridge asked me the same question in a letter received early this week.

I had a good look at the specimen. But it is always very difficult to give a definite opinion on such. With Fresh Material, it would be quite a different matter. So I suggest we wait until next season; when (if you care to have me) I will visit the locality with you, I can bring my own car.

The specimen has definite affinities with Pterostylis decurva, Rogers, and Pt. obtusa R.Br. But the absence of definitely-developed cauline bracts does suggest something new. The only other Victorian forms with such small bracts along the pedunde are Pt. revoluta, R.Br. and Pt. reflexa, R.Br. The column of your specimen

is similar to that in Pt. decurva, Rogers, but the labellum is different (or appears to be) from every one I have mentioned. But nearest to that in Pt obtusa. But the apex is not thickened as in Pt obtusa and it is apparently quite truncate at the apex!

What month did you locate this find?

Sincerely yours & kindest Regards — W. Pt. Nicholls.

Leeds Rd. Doncaster,
17th Aug. 1949.

Dear Mr. Nicholls,

I received your letter, dated 5.8.49 for which I thank you very much. The Greenhood in question was collected on a camping holiday on the 21st May 48 between Yarram and Woodside (closer to Woodside in the State Forest) near the Highway. We located two colonies fairly close together in forest country with very little undergrowth. At the time of collecting we could not satisfactorally identify it and friend suggested variations of either P. alata or P. obtusa. Not satisfied with these suggestions Mary wife finally showed a pressed specimen to the Rev. Mr. Rupp who is inclined to think it is something new.

We will be delighted to lead you to the lead next May and hope to collect the specimen again.

Pterostylis Cirandiflora

1966 Flowering Bennetts Brook & Marlo Approx June 10th
Also Granite Rock.

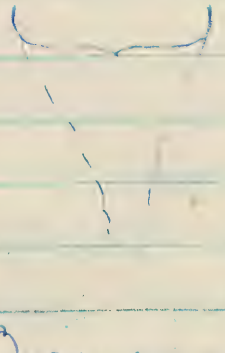
1968 Aug 31st Many flowers in bloom at Glengarry North; although we did not see any buds there were some flowers finished blooming and seeds set.

Scape: 28 cm to top of lateral sepals 6 cm for flower.

Dorsal Sepal: 6 cm long 3 cm. White with green stripes at base to bend. 1.5 cm wide at base - at bend .8 cm wide tapering gradually to a fine point. Dark green from bend. Joined to lateral petals except for last 2 cm.

Lateral Petals: 5+ cm - 3 cm to bend, 5 mm wide at widest near bend - 9 mm wide at widest flange. Usual effect of wide flange obtained because only 1 mm of lateral petal is under the dorsal sepal - ridge like mid-vein along petal where dorsal sepal edge is. - Flange is beautiful brown color.

Lateral Sepals: 7 cm long - connate for 2 cm, white & green striped - Sinus almost straight across



Sepals & Petals form real pitcher with dark green bevelled or rolled edge. Sepals taper suddenly to long very filiform points which spread 4 cm apart. In younger flowers lateral sepals almost erect.

Ovary: 1 cm long - green & white ribbed.

Sheathing bracts from stem 6 completely around stem, 3.5 cm long, highest ones longest. Final one commences below ovary (1+ cm) - reaches ~~part~~ partway up the flower.

Stem: very hairy.

leaves: rosette of many leaves - up to 13 - on stalk & raised above ground - not sitting right on ground. Each leaf with stem - leaf 1 cm each way - pointed - dark green above whitish below. — anything up to 8 inches from flower stalk.

labellum: 3 - cm long thin dark maroon — 1mm wide - with bend forward for final 3 mm. Final 2mm club-like. Tongue about .5 cm above the sinus and still visible when back.

Column: Beautiful. 1.5 cm high, wings .5 cm dark maroon. Yellow tip at top, pollen, Column white at back of wings with rostellum under wings. — Column on stalk 4 mm long.

labellum appendage: 5mm long, very hairy tip.

These specimens were bigger than any seen up near Lakes Entrance. Is it because of the dry season earlier.

Mr. Marshall found this area. Over concrete bridge over Eaglehawk Cr. up hill, round bend, on left side of left hand fork in road.

1969 July 20th Flowering at Glengarry North. Beautiful specimens darkly colored, some at least 15" high. leaves just coming, some flowers with no visible leaves. Columns so dark as to appear as if there was an insect inside.

Aug 24th found many spent flowers (20) a few in full bloom up road past Toongabbie Rd. at Glengarry North.

Prerostylis Cirandyflora (cont)

1970 April 28th Mrs Lyndon reports many plants with buds along roadside over in her area.

May 3rd Found ~~One~~ Two plants in full flower and very many buds, some well developed, in the Glengarry North area - past end of bitumen road.

Nov 23 In seed at hilly - Pilly Gully.

1973 June Flowering at Glengarry North

July 11th " " Toongabbie North.

1989 May 10th Many plants in bud in Boodyarra.

longipetala

Pterostylis (Reflexa)

1909 June 1st Received specimen from Mr Peterson who, in turn, received it from Mr McDonald. Flowering at Mt Raymond (I think). Specimen had been picked so had no leaves or bulb.

Scape. 11 cm to base of ovary. with 3 leaf bracts regularly up the stem. About 1 – 1.5" cm long with fine points stem clasping & very fine.

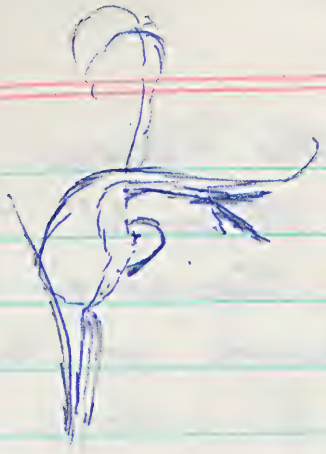
Dorsal Sepal: 4 cm long quite broad at base almost 1.5" cm at broadest part. Flower about 8 mm wide. 2 cm to lateral sepals & 2cm past them. Last cm. filiform & curved upwards. White striped green for 1 cm & then greenish brown for rest.

Lateral Petals: App. 2.5" cm going 1 cm past the lateral sepals Tips cross over under Dorsal sepal. Tapering to fine point Almost white for ~~half~~ halfway & then brown. Tending to curve downwards from dorsal sepal.

Lateral Sepals. App. 4 cm long 3 cm erect & last cm curving backwards. After the 1st cm filiform. Light brown. Sinus wide almost 90°. Joined about .7 cm & quite wide (app. .6 cm) below sinus.

labellum :- Apps 2 cm long 1 cm inside flower & last cm curving right back to touch the lateral sepals. Lovely deep burgundy color. tapering to fine point.

Ovary: 1 cm with floral bract 2.3 cm long.



1968 July 21st Very late this year but buds almost ready to open in Tgon Sth Reserve.
August 10th Flowering opp Mrs. O. Lades.
Sept 22nd " APM reserve.
Nov 3rd " Seninis Track
1969 July 20th Flowering at Glengarry North.
Aug 24th " in profusion along the road past the Toongabbie Road at Glengarry North.
16th Flowering at Wilson's Prom.
Oct 11th " " Burgoin's Gap
19th " " Shingle Ck Res.
1970 Aug 9th " opp. O. Lades.
29th " at Darlamurla.
Sept 15th " at T'gon Sth Reserve.
19 " " opp. O. Lades.
1971 Aug 8th " " Whitelaw's Track T.S.
Sept 17 " at T'gon Sth Reserve.
Aug 29 " in the Grampians.
Oct 17 " at O. Lades.
24th " at Reid's Corner
1972 Aug 28th " in little Desert
29th " in Grampians
1973 Aug 4th " at APM reserve
1975 Aug 30th " " Mullundung.
1989 May 11th Many plants in bud but almost in flower in Boodyarn.
1993 Sept 5th Flowering in Mullungdung along Big Tower Rd.
2000 Dec 3rd Growing in Sweetwater Ck. Reserve.
2001. July 11th From Jeanes' Pictorial Guide all our slides of P. hengifolia are P. melagramma.
2001 Aug 29th Flowering in Newborough bush.
2003 Nov 1 Still flowering in Edward Hunter Reserve.
2006 Sept 30 Flowering " Senenis Track

Ovary not much thicker than stem, not noticeable
Whole flower 1 cm long from front
Sialea from ovary to tip 1 cm.

2001 July 11" After checking with Pictorial Guide to Wild Orchids of Victoria I think Slides 2037/40 are probably P. bicolor not P. muticà as the ridges are on the labellum appendage & the lateral sepals are pointed.

Pterostylis Nana.

1966 Sept 17th Flowering along Racecourse Rd Rosedale. (near acacia juniperina).

Scape. - 16 cm overall.
Galea - 1.5 cm all green.
Lateral Sepals > 3 cm long overall. High above galea.
Labellum - very small, oval on stem about ⅛" long. Not visible in flower.
labellum appendage - very tiny and thin.
Column - longer than tongue quite visible in flower. tips of column wings brown.
Stem bracts - two.
Leaves - Rosette leaves, stemmed + pointed similar to Parviflora only larger.
Dorsal Sepal forms small short hood.
Lateral Petals. Under dorsal sepal, no flanged effect.
Sinus (Almost straight

1967 Sept 16 Flowering along Lime Pit Rd. 30-40 flowers in one cluster

1968 Sept 15th Flowering along Lime Pit Road, Rosedale
1969 Aug 9th " " " " " "
16th " at Wilson's Prom.
Sept 13th " at Rosedale.
Oct 12th " along Tyrongallth. Road
1970 Aug 27th " at Rosedale + Holey Hill Trig Pt.
1971 Aug 28th " at Wildflower Sanctuary at ~~Stath~~ Stawell and in many places throughout the Grampians.
1972 Aug 28th Flowering in Little Desert.
1993 Sept 5th " in Mallungdung near Thelymitra mathewsii.

Pterostylis Nutans.

1966 Flowering July 3rd. in School Pine Plantation
Flowering Granite Rock June 10th
Flowering along our track Aug 14th in profusion
Some odd flowers before this almost back to early July. Big specimens.
Appendage to labellum very ~~small~~ varies
Scape - 20 cm
Galea - 2 cm (almost square) Can be free of last bract or may be sheathed with bract. Brown from bend.
Dorsal Sepal - Very bent forward & tapering ^shape at point
Side Petals - Meet not flat. to form V under dorsal sepal giving pointed effect.
Lateral Sepals - 3 cm attaining horizontal position
1 cm / 2 cm
Labellum - brown stripe down centre, curved, very hairy.
Labellum appendage - large 6 mm
Sinus - approx 60°.
Stem bract's - 2 very stem clasping.
Leaves - Basal rosette variable.

July 1967 First flowers middle of July.
Aug 13th " Flowering opp. O. Wade's - many flowers
Oct 1 " " " " " "
" 22nd " " on Clark's Rd.
1968 June 8th " " on our track.
July 21st Quite a number in full bloom along Cochrane's lane
Sept 22nd Flowering well in Shingle Ck. Reserve.
Found red & black beetle in flower. Black head, red thorax, striped abdomen, had feelers, flew away although we did not notice wings.
Oct 27th Still flowering T'gon Sth Res.
Nov 10th " " Clark's Rd.

1969 July 20th Flowering at Glengarry North.
Aug 9th " " Rosedale
24th " " Glengarry North some as high as 15 ins.
Sept 11th Flowering in mass on a rock at the edge of the sand at Foleys Rd the Prom. There was nothing to protect them from the wind & spray and yet there was a group of about 50 blooms. In the bush they were up to 2ft high.
Sept 13th Flowering at Longford & Rosedale.
Oct 4th " " Burgoin's Gap.
19th " " Shingle Ck. Res.
1970 Aug 9. " in A.P.M. Reserve
23rd " in Gormandale.
Sept 15th " " T'gon Sth. Reserve.
19 " " opp. O. Lades.
1971 Aug 29th " on the road to Halls Gap in the Grampians.
Sept 7th Flowering in T'gon Sth Reserve.
Aug 22nd " in Lakes National Park - Loch Sports
Oct 17th " at O. Lades.
24th " " Reid's Corner
1973 Aug 4th " " APM reserve & on Track.
1990 July 22 " in natural bushland between Gormandale & Rosedale.
1994 Nov 26 " " APM block Stradbroke Sth. Gipp. Hway
Oct 28 " " T'gon Sth Reserve.
1991 Oct 12 " " Mt Heddrick
2004 Aug 27 " " Newborough bush.
2003 Oct 25 " " Big Tower Road & Anzac Rd. Mullungdung

Pterostylis Parviflora

1966 Flowering in Traralgon South Reserve April 25th. Sept 9th Many seed boxes of this orchid noticed in bush near reserve.

1967 Jan 14th Found flowering in swamp opp Waterlily pond Yallourn Nth. Very robust variety with flowers close together at top of scape + all out together.

1967 April 9th Flowering in bush at back of house.

Scape: 6 cm 3 leaf brads + one flower brad. This specimen had only one flower (easier to see as stem was not in way) usually more than one + hood faces into stem.

Dorsal Sepal:- 10 mm - 6 mm up + round bend to point - green striped.

Lateral Petals:- Same length as dorsal sepal narrower + giving slightly flanged effect at point - points separate.

Lateral Sepals:- 6 mm just to top of hood. Points very thin + curved to follow shape of hood. [ ]. Sinus V shaped + labellum just visible - darker.

Ovary:- 5 mm not stalked very slightly grooved.

Column + labellum not visible without separating flower.

Column: just as high as labellum.

Labellum: Red or maroon with two greenish white stripes. Point rounded just visible through sinus.

Leaf: Rosette at a distance from scape; more often appearing after flowering but sometimes present while flowering. Probably depending on number of flowers on scape. ie length of flowering period.

1967 Aug 13th Seed pods and leaves along Callignee Sth Rd.

1968 Apr 14th Flowering in bush past gravel pit. Quite a

number of plants in flower with at least two flowers open on many stalks.

June 16th Flowering in Tgon 5th Reserve. Quite a number. (leaves very big about ½" long without stem)

July 21st Still flowering in Tgon 5th Reserve but most flowers finished.

Oct 13th Plants in seed but seeds not scattered. Must be due to wet season.

1969 Apr 4th Flowering in bush near Prasophyllum Morrissii - quite a number five plants in one clump. All very tall about 6" high + some of the top flowers spent.

Apr 27th Flowering in bush behind sandpit - very prolific - about 7 plants in area of size of Dad's hand.

May 10th Flowering along Lime-pit Rd. Rosedale.

18th " at Willung South.

July 20th " Glengarry North.

Aug 24th Found plants gone to seed think they were forest variety of this orchid. The stems were mostly 1ft to 15ins but some were as tall as 2ft. with up to 23 flowers. The stems were very robust & the stem bracts were quite big. At the base of all the stems there was a side shoot with about 5 leaves.

Oct 4th Seeds on plants at Burgoin's Gap.

1970 Apr 26th Mrs Lyndon found plants in flower in Inverloch cemetry

May 3rd The large forest variety at Glengarry Nth had finished flowering. Some stalks had up to 14 flowers and many were reddish at top of ovary. As some seed boxes had matured & scattered seeds while some had just

Pterostylis Parviflora (cont).

finished flowering, we feel they must have a fairly long flowering period. Perhaps this is due to a long dry spell of app. 1 month after heavy rain in March. So once again we have missed this orchid. They certainly must be very robust plants.

May 25th Flowering at Little Tower, Willung.
Oct 11th In seed at Heyfield.
1913 May 13th Flowering at Rosedale.
July 16th " " Toongabbie North
April 21st " " Whitelaw's Track T.S.
1978 May 9th " in Holey Plains S.P.
1989 May 11th " in Boolyarn although most flowers were spent.

Pterostylis Pedoglossa.

1969 June 1st Specimen obtained from Mr Peterson who received it from Mr McDonald. Flowering at Racecourse at Marlo. Many many plants.

Scape: to ovary 7 cm. Tiny plant like P. nana.

Leaves Rosette of 5 leaves with scape coming from same position. leaves 1 cm long .8 cm wide stalked

leaf bracts - 2 one near base of scape & one just below ovary. 1st one half way round scape - top one completely encircling the scape. Scape very fine about 1 mm wide & pale green.

Dorsal Sepal: Appr. 2.8 cm long to tip of filiform point. 1 cm up, 1 cm across & .8 cm curving downwards. The filiform point appr 1 cm long. Appr. 3 to 4 mm across back of Dorsal Sepal.

lateral Petals: About 1.5 cm long. Not joined to Dorsal Sepal for last .5 cm & inclined to point downwards.

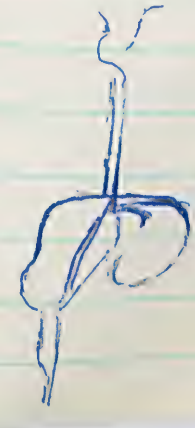
lateral Sepals: 3 cm long. Joined for 1.5 centimetres ~~then~~ dividing sharply around galea & then erect last 2 cm filiform - ⅔ end of sepals inclined to twist about.

Whole flower pale a sandy color.

labellum - not visible & flower too tiny to look inside.

Ovary :- .5 cm. grooved.

Sinus hugging galea.



In specimen we had lateral sepals were crossed over.

1969 June 28th Found flowering along Pine Tk Road Rosedale. Unfortunately the flowers had been scorched by the frost so we did not photograph them. Back in bush from where we had lunch, branch looked in fork of tree nearby.

1970 May 23rd Leaves on above plants above ground but no signs of buds.

1971 Apr 4 Checked Rosedale area but no leaves visible yet.

1977 July Plants at Rosedale with spent flowers. Flowers still good enough for positive identification. End of May, early June very wet. We had 6" rain in that fortnight & this could perhaps explain why plants flowered.

1978 April 20th Plants flowering. Sent specimen to the Herbarium for positive identification. Mr. Muir replied. We looked for these flowers about 3 weeks after the first heavy rains at the end of Autumn.

1990 July 23rd Found about 12 plants in slightly different area. No flowers or signs of them. Autumn break in April this year. Do not think these plants could possibly be P. parviflora as so many plants would be sure to have some flowers a any way it is late for them.

Pterostylis Pedunculata.

1966 Flowering August 21st. above our track.
3rd Sept Beautiful specimens in bush opp. O. Hades.
Tongue of this flower is very broad although just long enough to show. Found some very light colored flowers growing quite close to very dark ones.
(Could these be older flowers?)
Scape - 17 cm
Galea - 1.5 cm. maroon from bend. very short from bend.
Dorsal Sepal - Slightly curved up at point.
Lateral Sepals - erect all the way 2.5 cm maroon from sinus
Side Petals - Slightly flanged effect.
Labellum - oval shaped - hardly visible - purple 7mm on stem.
Labellum appendage - 3 mm very thin.
Column - 10 mm
Sinus - very acute.
Stem bracts - 2 very stem clasping - not noticeable
leaves - dark green, small, round, stemmed.
1967 August 13th Flowering in bush opp. O. Hades.
Sept 3rd Many flowers in bush opp O. Hade's. Some very tall, all very dark. One specimen with stem bracts very noticeable, spreading away from stem like cauline leaves.
Sept 24th Still flowering along Calligree Sth Rd.
1968 August 10th Flowering opp. Mrs O. Hades
" 18th Plants flowering on Traralgon side of Shingle Creek had thin green cylindrical portion leaving stem about half-way between leaf bract & flower - it was 4 cm long tapering to fine point at level of hood - leaving stem on side hood pointing so

This new portion comes up in front of wer. We found one plant with a double head or at least a flower & a bud. Bud was in front of flower so we wonder if this extra piece is the commencement of an extra flower that didn't develop. The stalk of all these flowers was very thick and the leaves very large approx 5 cm long and 2cm wide. Flowers are a little larger than usual but certainly wider across

1968 ~~Sept~~ Dec 22nd lots of flowers in Shingle Ck Reserve.
Dec 22nd In seed at Morwell Nat. Park

1969 Aug 24th Flowering at Glengarry North
Oct 4th " " Burgoin's Gap.
18th " " Shingle Ck. Res.

1970 Apr 4th ~~Checked Rosedale area but no plants visible yet.~~

1970 Sept 15th Flowering opp. O. Lades.
19 "

1971 Oct 10th Finished flowering in NPM reserve.
11th Flowering at O. Lades.
24th " at Reids Corner.

1973 Aug 4th " " T'gon 5th. NPM reserve.

1991 Oct 12 " " Mt Heddrick

2004 Aug 27th " in Newborough bush.

Pterostylis plumosa (Barbata)

1964 Oct 12th Flowering near Beaconsfield Upper and along Tynong North Road.

Scape: app. 1 ft.

Leaves: 6 basal leaves above ground. 3 large stem leaves & 3 clasping stem bracts.

Dorsal Sepal: 3.5 cm long - erect, at base with wide. wavy green markings on white background, main vein very pronounced. Dorsal sepal ending in point like bird's beak.

lateral Petals: not separated from Dorsal sepal & joined at centre front midway to other petals.

" Sepals: United for entire length. 2cm long. 5mm wide at base. yellow green - dense in nature. Reflute margins inwards, long oval marking at Tip. ~~Hang downwards~~

labellum: Hangs downwards 2 cm long about 4 mm wide at base contracting quickly to just a dark green line with many yellow hairs on each side 5 mm long. At apex of labellum a disc about 3mm long 2 mm wide green when flower first opens & brown later. labellum comes out of flower underneath the joined section of the petals.

Column: 2.5 cm visible through transparent hood. Columm mass very visible both through hood & from front through opening. Column very largely winged (deeply & broadly). Wings ending in filiform points about 5mm long: crossing over, sometimes protruding through opening.

leaves: 3 cm long 1 cm wide tapering to point.

Stem : very soft + pliable.

1994 Sept 9th Printed in update 4·3 new record of P. tasmanica is similar to P. plumosa with description.

1991 Oct 28th Flowering on Wonthaggi Heathlands. This specimen could be P. tasmanica as I didn't examine it but it was short & certainly had a small flower with a hairy labellum. Didn't notice arrangement of leaves.

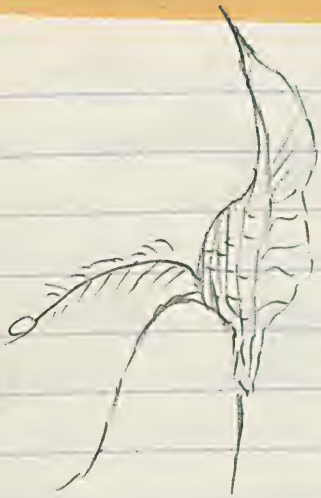
2001 July 11th Census Jan 2000 includes P. plumosa + P. tasmanica Flora of Victoria says P. tasmanica has more dense plumose labellum & shorter apical point to the galea. Jeanes & Backhouse don't have P plumosa but has 3. P sp aff plumosa. Our slides appear to be P. tasmanica in Jeanes & Backhouse but fit P. plumosa in Flora of Vic.

1969 Nov 8th Flowering at Wilson's Prom.

1972 Aug 28th Plant in Little Desert

1990 Nov 9th Flowering Mullundung Forest

1998 Jan. Vic records belong to P. plumosa Willis Ed. 2 Supp 1400 (1970) [C. Beauglehole + K. Rogers]



P. Plumosa

Column: 2.5 cm
visible through transparent
hood. Column mass
very visible both through
hood & from front through
opening. Column very largely
winged (deeply & broadly)
wings ending in filiform
points about 5 mm long
& crossing over, sometimes
protruding through opening
* Dorsal sepal ending
in point like birds beak
Leaves 3 cm long, 1 cm wide
tapering to point
Stem very soft & pliable

Lateral sepals split
Dunns Road, Tynong.

Pterostylis Pusilla

1966 Nov 20th Flowering on Clark's Rd. One specimen about 9 inches high.

1967 Jan 15 In seed on Clark's Rd.

Scape:- 5"

Leaves:- Bluey green rosette withering as flowers open

Dorsal Sepal:- Hoodlike Λ and pointed at top.

Lateral Petals:- Almost transparent, brown to maroon overlapping dorsal sepal.

Lateral Sepals:- Pointed down towards ground as in tall greenhood; edges curved upwards. United ⅓ distance; pointed + brown.

Labellum. Very long white hairs fringe all round labellum. oblonge shape with rounded corners. Very irritable.

Three stem bracts + one for each flower.

1969 May 14th. Leaves of Pusilla have appeared.

Aug 6th Five rosettes counted. This area did not get burnt. Max says up to 11 leaves on one rosettes, others between 5 and 8. (Did not flower season too dry)

Oct 4th Flowering at Burgoin's Gap. These specimens were much more green than the ones on Clarke's Rd. All these specimens had 7 hairs on each side of labellum.

1970 Oct 17th Flowering at Briagalong.

23rd In bud on Clarke's Road.

1975 Jan. Synonymous P. rufa Willis I ed 2 Suppl. 450 (1970)

[C Beauglehole, R. Parsons]

rufa synonymous P. biseta Willis I ed. 2. Suppl: 450 (1970)

[ibid]

Pterostylis Revoluta.

1965 Flowering at Miss Clark's June 10th.
1966. Possible seedpod. Granite Rock. June 10th.
1969 Specimen loaned by Miss Galbraith - came from
Apr. 14th. Beechworth. These flowers had their heads bent slightly while the ones at Miss Clark's were very erect.

Scape: Its flower was picked no idea except that stems we had was 15 cm.

Stem leaves: 3 Stem clasping 2.5 cm long. very pointed.

Galea 6.5 cm to end of filiform point. Last cm fairly fine less than 1 mm wide, last 2 cm light brown.

Dorsal Sepal: 6.5 cm long, last cm fine. Whole Sepal comparatively narrow. Approx. 1.5 cm wide at base but very curved so that measured straight across only 1.8 cm. After 1.5 cm up the width straight across is less than 1 cm and gradually tapers to point. Whole sepal white with green edge on each side & down the middle.

Lateral Petals: Approx 4.5 cm fairly straight, just under edge of dorsal sepal but crossing over about 1 cm from tips. Tips brown. Width of Petals & sepals at bend 1.5 cm. Because petals commence at side & then flatten across flower The galea has effect of having waist from back view. White or transparent with very fine green line at edge.

Lateral Sepals: 5.5 cm - last 3 cm filiform inclined to bend back but not regularly, rather

curving at ends. Sinus very deep at approx 60°. Sepals joined for 1.2 cm, green. Touching side of flower at 2.5 cm.

Labellum: Approx 2.8 cm long - approx 3 mm wide until last .5 cm & then fine and tapering to point. Labellum curves forward after 2 cm. Rather dark above & protruding through sinus about 1 mm at a point about 5 mm from peak V

Column: little less than 2 cm rather large & sitting in groove made by dorsal sepal.

Ovary: 1 cm ribbed. very light green.

Whole flower looks like very fine specimen of falcata. from side view. 3.5 cm across circle.

perhaps wider at top.

Back view. lovely elegant small base, big top but beautifully balanced. Top is rather flat while base is very round.

1973 Mr Thornley reports this plant growing at Rosedale.

1982 Apr. 23 Flowering in public land block at Boisdale.

1996 Apr 21 " " " " " 213 near Rosedale, leaves separate from flowering stalk, present at time of flowering. Also photograph these orchids in this area appp. 1990/1. Flowers in this block in 1996 were at back of block. Enter bush near big tree right on edge of fire break; 45 / my strides past rusty small drum. Turn left along rather obscure track. Go 100 paces with clearing with lots of Lomandra longifolia. Euc ~~pyg~~oriana at back on left Euc radiata on right, both big trees.

P. revoluta (cont-)

2001 July 11th According to Census Jan 2000 this name still applies but according to Jeanes & Backhouse P. revoluta is a N.S.W species & the Victorian species is P. sp. aff revoluta -

sanguinea.

Pterostylis (Vittata) Banded Greenhood.

1971 Sept 2nd. Flowering at Flat Rock near Mt Zero in the Grampians.

Plant app. 14 cm. with many-app 4-stem leaves and a floral bract for each flower. Floral bracts exactly same as leaves. leaves are bigger nearer the base. and are stem clasping with mid rib very prominent. lower leaves app 6 cm long and 13 mm wide.

Flowering stalk away from rosette. Rosette containing 5 to 12 leaves with stems, leaves blue green with rounded apex, main rib prominent.

Flower with stalk 1 — 1.5 cm

Ovary 7 mm long & deeply grooved.

Flower of very nodding habit.

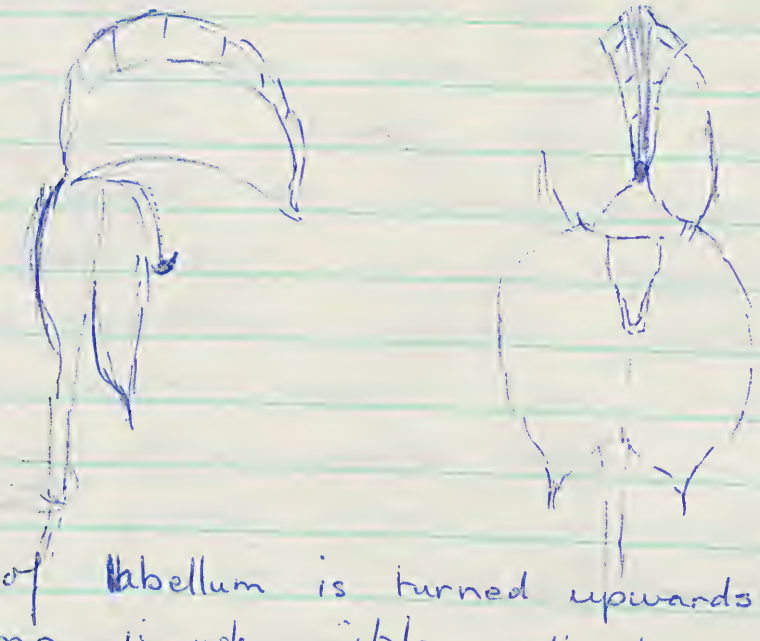
Dorsal Sepal - almost 1.5 cm long - not very wide & almost going to point ∧. White or almost transparent with strong maroon stripe full length & small narrow maroon stripes at right angles - app 5.

lateral Petals - Maroon with deeper maroon stripes lengthwise & forming sides of galea & meeting to a very fine short point.

lateral Sepals - Pointing downwards, very wide at top but curving in to fine acute points at bottom. 1.2cm long. Deep maroon colour.

Labellum: App .5 cm long darker than lateral sepals. Broad at base and rolled inwards at tip - whole with short white hairs all around. Labellum has noticeable 'stalk'.

labellum not very sensitive but did not return to open position while we were there.



Tip of labellum is turned upwards.
Column is not visible without mutilating flower.

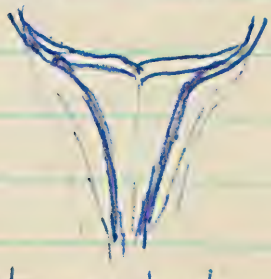
1972 Aug 29th Flowering in Grampians.
2006 June 18th " " Gurdies (Ralph's C.D)

striata.

Pterostylis (Alata)

1966 Flowering Granite Rock Approx June 10th
1967 " " " June 17th.

Scape:- 18½ cm with up to 5 leaf bracts. Flowers solitary.
Galea :- 3½ cm — 2 cm vertical & 1.5 round bend.
Dorsal Sepal:- 3½ cm - white with green stripes turning to brown towards tip and coming in sharply to a fine filaform point from 4 - 6 mm long - brown. 6 mm wide at bend.
Lateral petals: Not joined to dorsal sepal but forming a flanged effect by lying partially under dorsal sepal 3 cm long 6 mm wide, almost same width for entire length but sharply pointed at apex. More brown coloring for about 7 mm from apex. White with green stripes.
Lateral Sepals:- 3½ cm long - filiform points 2 cm long + curved forward noticeably ⌒. Sinus almost straight across. Sepals joined for 12 mm with definite brown stripes on each side of join + two at sinus Filiform points brown.



Labellum: just as high as sinus (12 mm) but not visible unless looking inside flower - brown.
Column:- 8 mm high, long bottom on column 3 mm long.
Ovary:- 1 cm long pale pink with dark pink at edge of grooves.
Flower Stalk:- 1.5 cm long pale pink.
Leaves:- rosette away from scape up to 8 leaves

stalked, a little bigger than Fishii by similar
leaf bracts on scape all stem clasping
Flower very colorful. for a greenhood.

1968 June 5th Flowering in orchid bed. Flower good
but plant dwarfed. no separate leaves. yet.

1969 Aug 9th Flowering at home Fir Rd. Rosedale.

1970 May 25th " " " " "

1971 Aug 22nd " at Lakes National Park - Loch Sport
Mr Willis identified.

2001 July 11th According to Census Jan 2000 P. alata is now P. sp aff alata
but according to Jeanes it is P. striata.

2003 June In 4th ed of Census it gives P. striata

Pterostylis tasmanica Southern Bearded Greenhood.

2001. Oct 27th Flowering at corner of Napier & Dog Trap Rds. Won Wron. Distinguished by shorter galea & darker gland on tip of labellum from P. plumosa.

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Natural Resources and Environment

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Wednesday, 21 November 2001

Bon Thompson
P.O. Box 644,
Downeys Lane,
Traralgon, 3844

Dear Bon,

It's great to know that you can get use from the new edition of 'Victorian Flora Species Index 2001'.

Regarding s.l. and s.s. these terms mean 'in the broad sense' and 'in the strict sense'. They are usually applied when a species has been split into more than one species. For example, E. baxteri s.l. was once considered to be a variable species with large forest forms and smaller, almost mallee forms. The smaller form has now been named E. arenacea so that E. baxteri s.s. is always a forest tree.

I will included your incidental record for Pterostylis tasmanica at Latitude *38°28'45"* and Longitude *146°45'30"*, AMG Easting 478921 and Northing 5740976, on 29–10-2001, Corner of Napier and Dog Trap Roads in the Won Wron Forest, YARRUM - East Gippsland, Grid T26 in the FIS.

It is definitely worth while lodging such specimens with the National Herbarium. There exists a data exchange agreement between the Herbarium and Department of Natural Resources and Environment regarding the site location of flora. Therefore if you provide data to either institution it will eventually find its way through the system to the other. At times there may be a delay in getting the information to the respective databases and validated for accuracy prior to release to others, however it is not necessary to let us know which specimens you lodge with the Herbarium.

If you have any queries, please do not hesitate to contact me.

Yours sincerely

Phillip Wierzbowski

Phillip Wierzbowski
Flora Information System Officer
Parks, Flora and Fauna Division

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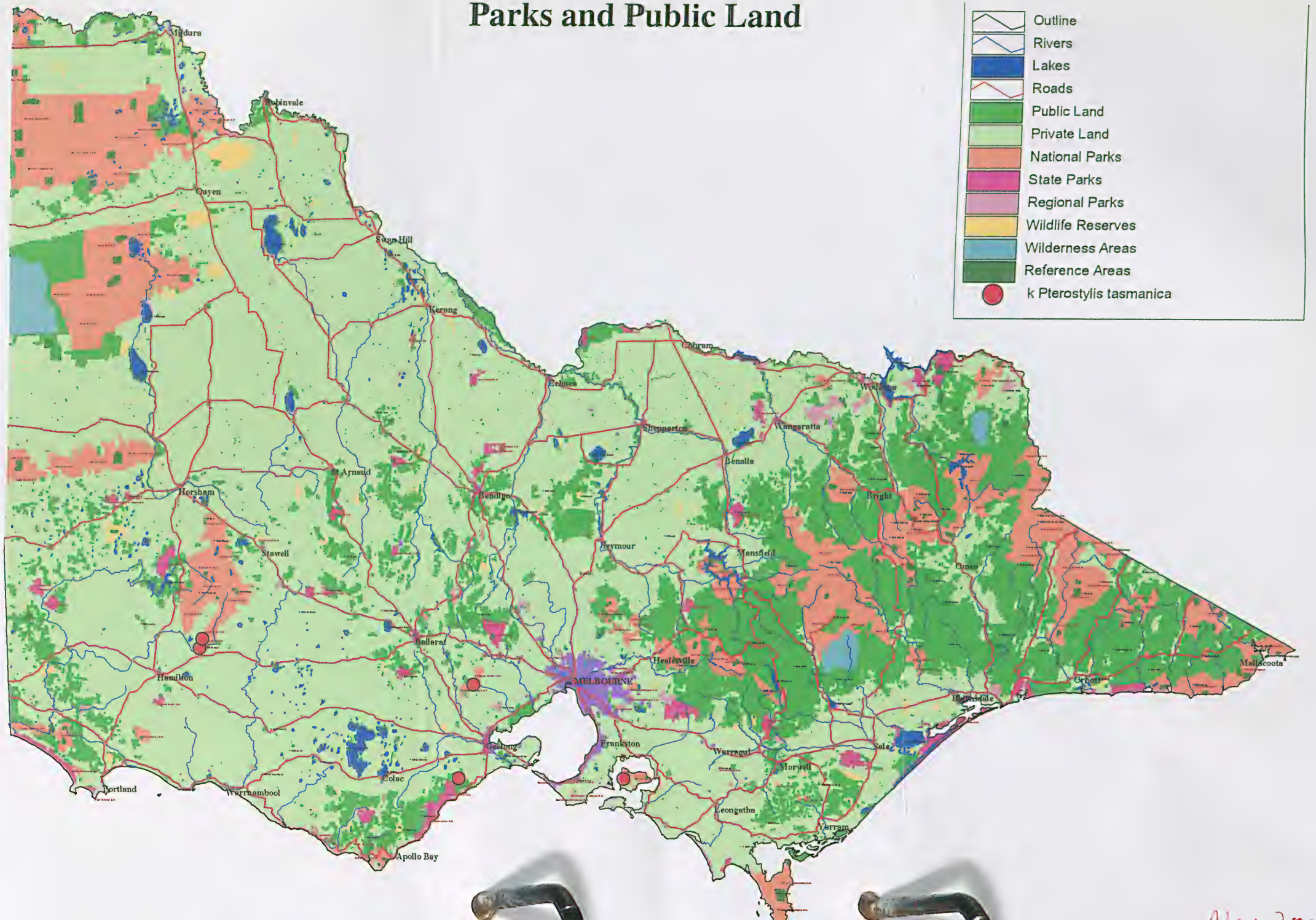
Victoria
The Place To Be

Parks and Public Land



Nov 2001

Pterostylis Truncata

1965 June 7th Received from Mrs Carr. Discovered in the Yuyangs the weekend before.

Scape. 6 cm (including flower)

Leaf bracts: 3 leaf bracts one at base of ovary. Leaf bracts as big as leaves and standing out from stem.

Dorsal Sepal: 5 cm long (7 mm wide at front) white striped with greenish brown (only 5 stripes) Tapering to short fine point - brown

Lateral Petals. 3.5 cm 5 mm wide with one edge under dorsal sepal to give the effect of wide rounded hood. White with approx 3 stripes of brown. Tiny sharp point brown.

Lateral Sepals: 3.5 cm long Joined for 1.2 cm. Much more striped than other segments and stripes green + thin. Sinus about right angle V. Filiform points diverging above galea. Flower only 5 mm in lower half.

Labellum: 2.5 cm long with very curved point so that the bottom of the point of the labellum is above the sinus and well through it.

Column — not visible from front but by looking in at angle 1.2 cm high. well down the labellum.

Ovary — 5 mm long, very thin, grooved and same green as leaves

Leaves - Rosette away from scape 4-6 leaves in rosette. Leaves with short stalks. Actual length of leave 1.5 cm and 1 cm wide Tapering to point. Bluish green leaves + underneath lighter.

Mrs Carr says plants were growing in earth collected

on granite rock. (country)

Pterostylis Tunsdalii

2006 Aug. 15th Flowering at Wilsons Prom (Ralph's CD)

X Ingens

Prerostylis (Acuminata) (Sharp)

1966 Sept 9 Flowering in bush opp. O. Lade's
Small insects on washhouse window found inside this orchid.
Labellum very conspicuous and long tapering point to Galea is brown - approx. same color as Nutans.
Labellum appendage no bigger than Alpina although this is a much larger flower.

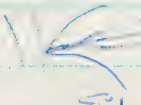
Description - Galea. - 4 cm long accuminate point - tip brown.
Scape - 28 cm
Lateral Sepals - erect 1.5 cm horizontal 3 cm perpendicular - exceeding galea. Sinus - right angle
Dorsal Sepal - wide almost to point.
Side Petals - Similar but crossed over each other under the dorsal sepal. This gives a pointed and narrow effect to galea.
Labellum - curved right back to touch lateral sepal below sinus. Broad & hairy
Still protruding when flipped back.
Labellum appendage - 3 mm (not big for large flower)
Column - approx 2 cm
Stem bracts - approx 3 cm long - hugging the stem.
leaves - 5 basal leaves lower three with stems.

1967 Sept 3. Flowering in bush opp. O. Lade's.
Sept 30 Flowering along Clarkes Rd.
1968 Sept. 17th " at Shingle Ck. Reserve.
Oct 20th Still " " " "
Observed lateral sepals dropped as flower matures
1969 Oct 19th Flowering at Shingle Ck. Res.
1970 Sept 19 " " " only on opp. side of water. No plants flowering near track yet. Lovely big specimens.

1971 Oct 17th Flowering at O. Lades
1973 Sept 5th " near Lake Eppalock - Bendigo.
1978 Jan. This species is reported hybrid between
P. falcata x P. nutans. P. Jones
Orchadian 5 (5) 524 (1976) [C Beauglehole
x R. Parsons]

Pultenaea Benthamii

1921 Aug 31 In bud on Wonderland Tour in the Grampians. Most unusual Pultenaea for us. Specially endemic to Grampians. leaves 1" long by ¼" wide with midrib extending into point on end of leaf. Edges recurved & midrib prominent. Bud triangular.



Flowers red & yellow on long stalks & curved.

Stipules long & thin, & two to each leaf base. leaves very plentiful, paler underneath. Stalks green but with greyish bloom due to very short white hairs.

Pultenaea Daphnoides (Large-leafed)

1966 25 Sept Flowering at Cowwar
1967 Oct 13th " " Haberfouche. leaf broad rounded at tip with point in middle
Nov 5th Flowering at Cowwarr
1968 Oct 13th " "
Nov 3rd " " Moondarra
1969 May 24th Plants growing at Cape Paterson.
Aug 24th Flowering at Glengarry North.
Sept 4th " " Wilson's Prom.
Oct 3rd " " Tyers.
Nov 2nd " " Briagalong.
1970 Oct 11th " " Heyfield
19th " " Briagalong
Nov 23 " " Lily Pily Gully.
1971 Nov 13th " " Cowwarr.
1993 Jan 31 Plant growing in Errinundra N.P.
1995 Oct 29th Flowering at Boronia site on ~~Freestone~~ Insolvent Track
1991 Oct 12th Growing on Mt Heddrick

Pultenaea dentata (Clustered)

1969 Oct 18th Flowering at Rosedale.
leaves incurved not grooved, Same color both sides or darker on back, widely spaced apparently glabrous. Stem green, blotched, with hairs. Stipules A small. Flowers stalkless in leafy head, all red in bud. hang stem from plant to flower. leaves unevenly spaced. More dense on plant part. Identified by Miss Galbraith and us.

1992 Nov 28th Plants almost finished flowering on railway reserve near Rosedale railway station. Plant inclined to be procumbent when smaller branches erect.

1994 Nov 26. Flowering in APM block Stradbroke Sth Gipp. H'way

1994 Oct 8th " " reserve at Dawson

1996 Oct 12th " " Paradise Beach near 2nd pipeline in N.P.

1999 Oct 11th " " Cidden Beach with Thelymitra epipachtoides.

Pultenaea fasciculata

1990 Jan 24th Flowering at Rocky Plains at Wulgulmerang. Very fine plant. leaves very small 4mm long and 1mm wide. Stems greyish white. Much branched plant. Flowers in clusters at the ends of branches. Warm orange color with red on standard. Tiny flowers 5mm across flower. Calyx almost half length of flower.
Identification by Miss Galbraith

1994 Jan 26th Flowering on Bogong High Plains
Almost mat-like plant with alternate leaves <5mm crowded with conspicuous stipules. Leaves curved upwards till they appear terete with slender brown apical point. Flowers axillary on very short peduncles although these near end of branchlets crowded & appearing clustered. Calyx length of tube & very hairy. Flowers bright orange colour.

Pultenaea foliolosa Small-leaf Bush Pea.

1990 Oct 17th Flowering at Briagalong. Identified by Miss Galbraith.

Leaves greyish green 1-2 mm long, very densely arranged on the branches that although opposite appear to be all around branch. Flowers very reddish outside & orange inside about 1 cm long & 1 cm wide towards ends of branches. amongst the leaves Do not appear to have stalks. Sepals ½ cm long & spreading green & brown.

1994 Oct 30 Flowering in Dawson River Reserve.

Pultenaea graveolens

1973 Sept 4. Plant growing in Whipstick. Not sure of this identification but Willis says it is a fragrant plant & leaves smell pleasant when squashed. Plant looks a little like Dillwynia sericea although I think it is even more hairy leaves ~~about~~ less than I am very hairy - hairs rigid & at right angles to the leaf surface. Leaves tend to point upwards but many spreading.

Pultenaea Gunnii (Golden)

1966 Sept. 9th Flowering along Clark's Rd.
1967 Sept 30 " " " "
Oct 13th " " Haberlouche
Nov. 4th " Wolfe's swamp
1968 Sept 22nd " in APM Bush.
Nov 3rd " Anderson's Track
17th " Dead Horse Gully.
1969 Aug 31st " N.P.M. Property at end of Cochrane's lane.
Oct 12th Flowering at Beaconsfield Upper
19th " " Clarke's Rd.
1970 Sept 15th " " Traralgon South Reserve.
19 " " Call Sth Rd.
Oct 19th " " Briagalong
1971 Sept 19th " " Whitelaw's Track.
Oct 10th " " APM reserve and amongst pines.
Oct 29th Flowering at Reid's Corner.
Nov 13th " " Cowwarr.
1995 Apr 12th Growing in Drouin Water Reserve
2001 Aug 27th " " Newborough bush.
Dec 1 " " " " Sandy Ck.
2004 Apr 3 " " Colley's Rd Block.
2006 Sept 30th Flowering " Seneris Track

Pultenaea hispidula. Rusty Bush-pea

1970 May 25th Plants with no flowers or buds but identified by Miss J. Galbraith. Small drooping bush about 2ft high along roadside near Bushy Clubmoss area on Old Park Road, Willung. Plants soft greyish green, very soft to feel, the leaves grow all round stem, giving a very starry effect, young branches are very hairy + brown stipules are large and quite obvious.

1974 Spring Plant flowering in Mullingdung Forest at Willung South area.

1995 Oct 8th Flowering in Flora Reserve past rubbish tip at Heyfield. Short leaves less than 1cm so rolled as to appear cylindrical or terete, spreading & giving the appearance of being bundled. leaf points not pungent - often curved back with short white hairs. Flowers very short-stem + leaf growth above cluster of flowers.

2009 Oct 12th John Top brought specimen from ~~about~~ reserve at Heyfield (big reserve) & I thought it was this species. However Bob Parsons said it was P. hauiflora. So I will have to be very careful looking at the bracts + bracteoles as both these species can have 3-lobed stipules, but P. hispidula can also have entire stipules. Have to make sure we see leaves before they curve up, as both look similar after they curve.

Pultenaea humilis Dwarf Bush-pea.

1996 Oct 12th Flowering at Paradise Beach near 2nd pipeline in N.P.

Key: - 38 Leaves elliptic to narrowly ovate, widest above middle, more or less flat, upper surface green, clearly visible, lower surface reddish-brown; much darker than upper surface. P. forsythiana

38 Leaves linear-terete or ovate, often cordate, surfaces usually concolorous.

39 Bracteoles much longer than calyx tube, ovate, tapering abruptly into long slender acute tip; stipules densely fringed with woolly hairs. P. acerosa

39 Bracteoles usually shorter than calyx tube, lanceolate, tapering into short, acute tip; stipules glabrous to pubescent, but never woolly.

P. juniperina

In drawing P. juniperina leaf sometimes boatshape.

P. forsythiana stipules only stated as slender, recurved tips. while P. juniperina lanceolate appressed to stem.

Pultenaea Juniperina (Prickly)

1966 24 Sept Flowering at Darlamurla
1967 8th Oct " " at Frank's turn-off.
1968 20th " " " Mattingley's Hill
3rd Nov " " Moondarra
1969 Oct 19th " Clarke's Road.
1970 Sept 7th " Hazelwood North.
Oct 17th " at Briagalong
1971 Sept 12th Plant growing on McKenzie's Fall Trip in Grampian. Leaves about 8mm long with fine stipules. leaves ending in pungent point and margins curled upwards. leaves quite dense.
1971 Oct 27th Dad brought home flowering specimen from Work.
1994 May 1 Growing on Austens property near Darlamurla.
1995 Apr 12th " in Drouin Water Reserve.
Oct 29th Flowering along Insolvent Track.
1997 Apr 5th Growing in APM Reserve - Grand Ridge Rd.
Muellena Vol. 8 No 3 May 1995. P 391. Discussion on varieties of P. juniperina raised to species level.
2000 Dec 3rd Growing in Swedwater Ck. Reserve.
2001 Dec 1 " " Sandy Ck bush, Newborough.
2001 Flora of Vic. only records P. juniperina in Grampians & one spot in central Gippsland which is doubtful. While P. forsythiana is recorded around our area
2002 Apr 3. We did not find this plant today but it is recorded in Colley's Rd. Block by Cliff Beauglehole in Spring 1983.

Pultenaea. largiflorens.

1970 Oct 11th Flowering at Heyfield. Plant with many leaves, branches & undersides of leaves hairy giving plant a more hairy look than usual for Pultenaeas in our area. Leaves were arranged in threes and lighter in colour than usual for Bush Peas.
Miss Cialbraith verified identification.

1973 Sept 5th Flowering at Lake Eppalock - Bendigo.
1973 Oct 28 " - Channel Country of Avon River.
1987 Oct 31 " along Johnsons Lane, Seaton.
Leaves blunt with recurved apex. Flowers in clusters at end of short branches.

1994 Nov 26th Flowering in RPM block Stradbroke Sth. Cipp. H'way.

Pultenaea Mollis

After using the microscope and the key in Flora of Victoria we decided the Pultenaea that John had at botany on 30th October was *Pultenaea mollis*.

Just looking at it the crowded leaves and the persistent reddish bracts in the flower heads led me to suspect *Pultenaea mollis*. But as there are 49 species of Pultenaea in the Flora we needed to be more scientific.So in the key it was:-

Leaf-blade margins incurved; ovary pubescent to the base; leaves alternate; bracteoles entire; leaf-apex obtuse or acute but not pungent (ours had a tiny point); leaves longer than wide, flowers sessile; flowers in terminal head-like clusters of more than 3 flowers; flowers in tight head-like clusters; flowers yellow or orange; leaves ovate, eliptic or narrowly obovate, more than 4 times as long as wide, upper surface hidden or partially visible; widespread very variable shrub.

The distribution states widespread and locally common in dry and moist forest and occasionally heathland south of the Great Dividing Range, including Grampians, Portland, Anglesea, Gembrook-Beenak forests and East Gippsland.

It is not recorded where John found it in the Boisdale area so I have sent a specimen to Dr. Parsons for Margaret Corrick if she is interested and also a specimen to the herbarium as a record for that minor grid S54.

P.T.O.

Pultenaea Laxiflora

Oh dear!!! I have made another booboo. I have had word back from David Cameron, through Dr. Parson, that John's specimen is a perfect match for *Pultenaea laxiflora.* David explained the bracteoles are 3-lobed. I have studied the two species in Flora of Victoria and the description on the back of this page, except for the bracteoles, fits either species. I have great difficulty separating the bracts, bracteoles and stipules close to the flower in Pultenaea species even using the microscope. To add to the confusion the description of *P. mollis* in the Flora of Victoria mentions 'the bracteoles appearing 3-lobed from the base' but apparently each is an entire bracteole. I have come to the conclusion that the only way I can separate the two species is to look at the leaves. In the illustrations *P. mollis* has the leaves erect and curving in towards the branch while *P. laxiflora* has the leaves recurved from the branch. This is not very scientific but as the recurved leaves are mentioned in the description of *P. laxiflora* I assume it is a constant feature. *P.laxiflora* is not common in the same area so the specimens will still be acceptable for mino grid records. John has since found another patch of (what I think is) *P. laxiflora* in an area near Glenmaggie so I have sent specimens of it away also for minor grid records.

Pultenaea laxiflora (loose flower)

1968 Nov. 4th Flowering on Wolfels property.
1970 Oct 11th " at Heyfield.
Miss Galbraith verified identification.

2004 Nov. 4 Specimen I thought was P. mollis was identified by David Cameron as P. laxiflora David says bracteoles were 3-lobed. He says our specimen was a perfect match for P. laxiflora. Description in Flora of Vic says leaves are recurved from branch & it was so in the specimen See further notes in P. mollis
John Topp brought specimens from corner of Luckman Rd. & Warragul Tom's Creek Road in 554 and a week later a further specimen from A area of land between Tinambra/Sealon Rd, Hinge Channel Road & Weir Rd. near Glenmaggie in 553. Hope 2nd specimen is correctly identified.

2005 Mch 8 Finally got letter from Herbarium verifying identification.
2009 Oct 12th John Tap brought specimen from Heyfield reserve I thought it was P hispidula but Dr. Parsons said it was P. laxiflora So I have to look carefully at the bracts & bracteoles. Also have to find leaves before they curl up as they both look similar after they curl.

	Lanceolata	*Mollis*
Shrub.	to 60 cm	3 m high.
Stems	terete with pale appressed hairs	terete with pale spreading curled or twisted hairs
Leaves	alternate, linear-terete 4-12 mm grooved above, usually broader at apex, obtuse, recurved upper surface (if visible) light green and glabrous; lower surface glabrescent, slightly scabrous	alternate narrow linear elliptic or terete (7-) 10-20 (-26) mm 0.3-1.2 mm wide apex acute not purgent; lower surface with loosely appressed spreading or occasionally tubercular-based hairs upper surface (when visible) glabrous, margins inrolled.
Stipules	Δ 1-2 mm.	(1.5-) 2-3 (-5) mm long usually strongly recurved, rarely appressed
Inflorescence	3-6 flowered head-like at tips of short lateral branches terminal shoot soon elongating	1-10 flowered terminating short lateral branches. floral leaves with slightly to greatly enlarged stipules 2-9 mm long sometimes resembling bifid or trifid bracts often viscid.
Peduncles	pubescent	
Bracts	2-3 mm deciduous at anthesis apex usually split, a reduced leaf often present as a central lobe or innermost bract.	Floral leaves sometimes resembling bracts.
Calyx	5-7 mm tube glabrous or hairy lobes tapered into long flexuose tips, densely covered with long pale hairs	4-8 mm variously hairy often viscid.
Bracteoles	attached at base of calyx tube 4-5 mm long green leaf-like with pale scarious stipular outgrowths at base	attached at base of calyx tube equally ovate 2-8 mm variably hairy, glabrous or viscid, rarely stipular ~~and~~ & appearing 3 lobed from base.
Standard	8-9 mm wide	8-12 mm wide
Ovary	× lower half of style covered with white silky hairs.	ditto.
Pod.	slightly flattened, beaked, covered with pale hairs, half exserted from calyx.	Ovate at least half enclosed by calyx.

Picture shows leaves if anything incurved (?)

8/11/04

Dear Bon,

It was really interesting (& amazing!) to get your orchid counts. Very many thanks.

a) Re your quadrat question — yes I can see you would have to have quadrats if trials/treatments are to be done but I don't see why you need them for general counting of population size. And, ~~if~~ as you say, of course it's important to survey outside the known area to see if new ones are appearing.

— your system with the cards sounds just fine.

I suppose in some cases a couple of stakes at the limits of the patch ~~which~~ would let you see how far the population has moved in 12 months time.

For really detailed stuff — ie. plant demography, where you want to know lifespan, rate ~~do~~ of turnover, births/deaths etc. ~~one needs to tag each~~ it's tagging & numbering each plant that's important rather than ~~having~~ putting down quadrats.

b) Pultenaea mollis. Many thanks. Yes I see that gap in its distribution in your area ~~on~~ on the Fl. Vic. map. I'm pretty sure Margaret Corrick is still in regular contact with the herbarium, so should hear of the record, but I will make sure.

c) Thanks too for your kind invitation to call in, plus the directions. I'll certainly do that if I'm in the area. I'm still writing up past work but will ~~to~~ eventually get back to new projects, meaning new field work, possibly fairly soon.

All the best,

BG

Dear Bon, 9/11/04

Oh Crikey! Every year we hire David Cameron to come in from the Rylah Institute (ARI) to check the plant names on all the Botany 2 students herbaria. Because he is here this week more or less on a whim I left him your specimen labelled Pultenaea mollis to check.

He is absolutely adamant that it is Pultenaea laxiflora He said to tell you that at key couplet 27, the bracteoles are 3-lobed — altho' the outer lobes are often obscure as the key says — but definitely present. He says your spec is a perfect match for P. laxiflora in every way.

It will be interesting to know if the Herbarium picks that it is laxiflora! — but perhaps you haven't sent it yet?

David is excited about the distributional significance of it — you will see in ~~the~~ Fl. Vic. ~~just~~ that isolated record from "Heyfield" (but see attached page from ACB)

Bon, have you seen laxiflora in the field yourself?

So — very interesting record. Am pleased & relieved I got David to check it. (He's very reliable).

David wonders if you or John Topp would be kind enough to stick a cross on the map re the location (~~auto~~ our best map doesn't show Luckman Rd). He wants to add the record to the ARI and MEL databases.

Good one Bon, Many thanks

Bob

D W39 19A Mitchell River SP see L.C.C. (1982)
f W41 - Ward Crossing (?) see L.C.C. (1982)
f W41 28e WSW of Bruthen (UN) J.R.Turner June 1974 pers.comm.
f W41 - 3Km N of Sarsfield (?) (MEL-P.Gullan 380, ?)
g W42 36g Colquhoun State Forest (HP) J.R.Turner May 1980 pers.comm.
g W52 - Private Property (PP) R.Clark & J.G.Eichler 15 July 1978 pers.comm.
H W43 40A Lake Tyers-Nowa Nowa SP (MEL-J.R.Turner 83, 27 June 1985)

Pterostylis mutica
c W37 18e NW of Stockdale (UN) J.Galbraith, W.Cane, O.& B.Thompson pers.comm.
c X1 - Sale (?) see Willis (1970)
G W25 34B Timbarra River NFZ

Pterostylis nana
c W37 18e NW of Stockdale (UN) R.Knight 1978 or 1979 pers.comm.
F W48 21A Moormurng FF (MEL-G.W.Carr 7121, 25 Aug.1976)
f W33 26g Nicholson-Mt.Alfred State Forest (HP) J.R.Turner Aug. 1984 pers.comm.
g W52 38a Lakes Entrance-Lake Tyers Coastal Reserve (CR)

Pterostylis plumosa
G W34 31D Kanni FR
g W34 - Buchan Golfcourse (-)

C2 Pterostylis reflexa
c S54 - Newry Hill Climb (Rec) see L.C.C. (1983)
g W26 - Buchan Cemetery (-) (MEL-O.& E.Brewster May 1977)

Pterostylis rufa
a S44 10d SE of McMillan Lookout (UN)
c X1 - Sale district (?) see Willis (1970)
F W49 21A Moormurng FF J.R.Turner Oct. 1984 pers.comm.
F W22 24B Nicholson River NFZ (MEL-J.R.Turner 9, 25 Nov. 1984)
g W25 39g S of Timbarra (UN) J.R.Turner pers.comm.

Pyrorchis striata

C3 Pultenaea foliolosa
C W37 15B Freestone Creek NFZ
c W38 18e NW of Stockdale (UN)

Pultenaea hispidula
f W32,41 26f,g Nicholson-Mt.Alfred State Forest (HP)
g W35 39j S of Buchan (UN)

Pultenaea largiflorens
A S53 1A Glenmaggie RP
A S53 3A Heyfield FR
A S53 3B Glenmaggie FR
C S45 14A Avon-Mount Hedrick NF-SR J.Galbraith, W.Cane, O.& B.Thompson pers.comm.
f W41 26g Nicholson-Mt.Alfred State Forest (HP)
f W41 - Bruthen to Fairy Dell (Rd) (MEL-K.C.Rogers 10 Nov. 1973)
f or g W41 - Bruthen (?) (MEL-N.A.Wakefield 3501, Nov. 1945)

Pultenaea laxiflora
A S53 1A Glenmaggie RP
C S45 14A Avon-Mount Hedrick NF-SR J.Galbraith, W.Cane, O.& B.Thompson pers.comm.

The one you sent is S54

C1 Pultenaea linophylla
g W52 38a Lakes Entrance-Lake Tyers Coastal Reserve (CR)

Pultenaea mollis
C W37 15B Freestone Creek NFZ
c W37,38 18e NW of Stockdale (UN)
G W24,33 32A Mount Elizabeth NF-SR

Pultenaea muelleri
A S43 4A Mount Useful NF-SR
a S43 8a Barkly-Goulburn State Forest (HP)
a S43,52 10a,b,c Uncommitted areas (UN)

Pultenaea peleacea
c W47 - SW of Fernbank (Rly)

C Pultenaea viscosa
c W37 18e Ten Mile Track (UN) (MEL-M.G.Corick

laxiflora

Pullenaea ~~multis~~

Minor Grid S 54

Corner of Luckman Road & Warragul Tom's Creek Road, (NW of Boisdale).

Collected 25/10/ar

Identified by Ben Thompson

Collection number 233

Collected by John Topp.

hitherto unknown from area !

Warrigal Tom Creek Rd

ACB's map spells it 'Warrigal'

Pultenaea mollis (Soft)

1967 Oct 13th Flowering at Habertouche. Long leaves, narrow and very soft to the touch.

1969 Oct 12th Flowering near Emerald.

1971 Aug 29th Plant in bud throughout the Grampians

1972 Aug 30th Flowering in the ~~Hall~~ Grampians near Giellon George. Long stipules. Branches hairy, leaves with fine hairs. Flowers in clusters at ends of branchlets. Buds very hairy. Notes say plants were sticky.

1966 Nov 20th Flowering at Cowwarr. Identified as Pultenaea angustifolia then. Now recorded as above. See also next page.

1995 Oct 29th Flowering along Insolvent Track 1.9 km from Mt Ray Track. I am not sure of identification. Will send to Dr Parsons.

Leaves ± 1cm long, incurved with lamina on upper surface inclined to be shiny but could have very fine hairs. Undersurface with long, appressed hairs on dull surface. Leaves have petiole which is appressed to surface of branch giving the effect that leaves are sessile. Branches hairy especially in young growth. Stipules conspicuous ~~&~~ linear, painted & red. What I think are bracteoles are at base of hairy petiole of flower, long, red & curved back. Think they would be about 8mm long. Flowers in cluster at end of short branches but each has its own separate petiole & all do not come from exactly the same place. There are from one to about 5 flowers in each cluster. Bracts are broad & as long or longer than calyx & some ending in a long

fine point. Calyx lobes narrow + tapering as long as or longer than calyx. Flowers mainly yellow, small. leaves appeared to have brown painted tip that was apparently caduceus as all leaves did not have the tip. Tip not pungent. Leaves were mostly erect but slightly curved inwards toward branch.

1997 Oct 25th Flowering in Laberlouche. Illus. good in Flora of Victoria pp. p. 791 Volume 3.

Wed Oct 30th John Top brought specimen from corner of Luckman Rd + Warragul Tom's Creek Road + we identified it as P. mollis + send specimens to Bob Parsons + also to the herbarium. David Cameron identified Bob's specimen as P. laxiflora by the bracteales being 3-lobed but is definite in his identification. From my reading of the Flora of Victoria under P. mollis it says 'appearing 3-lobed from the base'. As I can't differentiate bracts, bracteales + stipules even under the microscope I am happy to leave it to the experts. Only feature that is easy to see, as far as I can make out is that leaves in P. mollis appear to be slightly incurved + erect ψ + in P. laxiflora they appear recurved but this is not scientific. Sent further specimens to Bob from a triangle of land in the corner between Tinambra/Seaton Road, Angle Channel Road + Weir Road. Again John Top's specimen. Have suggested it may also be P. laxiflora by the leaves!

Pultenaea from Freestone Creek

Leaves obscured but not distinctly
Midvein very conspicuous.
Leaves hairy on upper surface but
with long appressed hairs
Undersurface hairy other fine short
hairs. Leaves could have discolorous points.
Flowers ± 4 in groups with a cluster
of leaves. Hairy bracts with long awn.
Flowers yellow.
Groups of leaves growing out of
terminal cluster at apex of branch
Other flowers cluster terminal on
short branches to 2" long.
Branch hairy ribbed
Stipules dark lanceolate.

9 km from Mt Ray Road on
Insolvent Track.

P. mollis

Dear Bon,

Margaret Corrick just rang me re your Pultenaea

a) Definitely Pult. mollis.

b) Cliff B. has a collection from same minor grid. But because his lacks a precise location MC says it would be nice if you are ever back there please could you forward a larger spec. with a label giving location. Flowering or fruiting — fruiting just as good. I would send it on to MEL.

c) MC says there are a no. of forms of P. m. including some undescribed taxa. Needs a research student to do a major study but too big for MC to tackle.

Cheers

Bob

27/11/95.

mollis

Pultenaea (hibbertioides) Page 2.

1969 Sept 4th Flowering at Wilson's Prom.
Identified by Miss Galbraith Dense shrub with leaves incurved so as to appear channelled on the upper surface about ½" long, ending in brown point not pungent but slightly recurved. Stems green very hairy with long red stipules. Leaves quite dense and new shoots grow out of centre of flower cluster after flowers have died, in fact some shoots are visible while flowers are still blooming. Flowers at end of branches, almost stalkless. Calyx & branches red so as to give a reddish appearance to the whole plant. Leaves all curved upwards. Flower mostly yellow, only some red diverging lines (very fine) on the standard. Standard large almost circular, wings yellow, long as standard, keel red, but covered with wings.

1997 Oct 25th Flowering at Haberfield

Pultenaea Muelleri (Fragrant Bush Pea)

1967 Feb 6th Flowering at Erica.
1967 Oct 13th " " Haberlaughe
1968 Jan 18th " " Baw Baw. Does not look like pultenaea as flowers are singly over the bush. Even bushes with many flowers the flowers were not in heads leaf lanceolate pointed not very big. Filaments in flower were all free and flower bracts were close to flower & quite big. ½ size of flower tube.
1970 Jan 24th Flowering at Walgulmerang.
1969 Nov 23rd " at Mt. Baw Baw.
1971 Jan 15th " at Mt Useful.
Jan 30th " at Mt Howitt Hike.
1973 Aug 11th Plant growing in Boola Boola forest.
1991 Nov 23rd Flowering at Haberlaughe.
1994 Jan 16th " " Mt. St. Gwinear & Mt. Erica
1995 Jan 15th " on Dargo weekend
1997 Oct 25 " in Haberlaughe Flowers very sparse, leaves dark on upper surface. 3 veins visible. leaves spreading but not reflexed.
Ill. Flora of Victoria p. 782 Volume 3.

Pultenaea Pedunculata (MaHed)

1966 Oct 9th Flowering in our paddock above gate.
Nov 20th Still flowering at Cowwarr
1967 Sept 1 Flowering at Glenmaggie
Nov 5th " " Cowwarr.
1968 Sept 3 " " Glenmaggie.
1969 Nov 2nd " " Cowwarr.
1970 Oct 11th " " Heyfield
1972 Sept 10th " at Rosedale on corner of turnoff to Haley Hill Trig Point from Chessum Road. Flower on long peduncle, stipules quite conspicuous. Plant makes mat about 3ft across. leaves very small. Only few flowers yet.
1993 Nov 23rd Plants growing at Dawson Reserve, seem a higher plant than the usual very flat mat plant. Also the peduncle is shorter than we are used to. They were only ½" long and curved in half circle which tend to make it look like it is sessile from a distance. Must be same species as Willis says the peduncle is longer than the leaves & they are certainly that.
1994 Oct 30 Plants growing in Dawson Water Reserve.
" " " " Ruby " .

Pultenaea retusa.

1969 June 14th Many buds on plants found at Granite Rock and other place during holidays. leaves 5mm long 2mm wide, broadest at tip. ∇ shape. but no indentation as in scabra, stalkless.

Oct 8th Flowering in A.P.M bush near reserve.

1969 Aug 29th Flowering at Granite Rock. Just beginning to come into bloom.

Nov. 15th. Flowering at Cowwarr. This plant did not have the broad leaf but was lanceolate & soft. Plant very hairy and flowers in a clustered (photographed.) Miss Galbraith identified.

1970 Oct 25th Flowering at Cowwarr presume this is the same as above.

Flowers in clusters at end of small branches. This specimen had lots of flowers which do not appear to open fully but rather remain boat-shaped. Flowers rather large about 5mm high. Upper surface of leaves glabrous but lower surfaces hairy, mostly lying along leaves. Leaves incurved broader at tip & indented also at tip. Bracteoles close to calyx and entire. Calyx and ovary both pubescent. Style curved but not hooked. Upper branches pubescent & very leafy. lower branches with

leaves much flatter more like our relusa.
old branches with very few hairs.

1971 Oct 10th Plants grown in APM reserve both flowering.
1994 Nov 26" Flowering in APM. block Stradbroke Sth. Gipp. H'way.
1996 Nov 7th " " Giffard Rifle Range.

Pultenaea Scabra (Rough)

1966 24 Sept Flowering Darlamurla.

1967 June 24th Plants with tiny buds on Warragul excursion
leaves opposite, approx 1 cm long, broadest at tip with
decided indentation at tip; edges recurved, ~~do~~ green on
top but grey green underneath. Branches woody.

1967 Aug. 27th. Plants found on top side of road in
APM bush with well developed buds.

Oct 13th Flowering at Labertouche

1969 Oct 12th " " Tyrano

Nov 2nd " " Briagalong

1970 Oct 17th " " "

1971 Sept 2nd Flowering on Mt Zero trip in the Grampians
Plants exceptionally woolly. leaves very dense
with wedge shape and indentation at tip.
Whole plant densely covered with hairs —
branches, both sides of leaves, calyx, stems +
buds. Buds brown as well as hairy.

1972 Aug 29th. Flowering in the Grampians.

1973 Aug 30th Flowering in Mullundung Forest.
leaves decidedly two lobes with apex turned
under give almost Y shape to the leaf.

Sericea

Pultenaea (paleacea)

1969 Oct 18th Flowering at Rosedale

Stipules long hairlike. leaves recurved. Stem brown, very hairy, depressed.(hairs) Under side of leaves hairy, white recurved point to leaves. Widest at tip - channel for vein. Flowers red & yellow keel red wide at bottom. Flowers almost stalkless.

Identification verified by Miss Galbraith

1990 Sept 16 Flowering on block 213a. between Gormandale v Rosedale. Flowers a cluster with brownish bracts. Only first row of flowers in bloom.

1996 Oct 12th Flowering at Paradise Beach near 2nd pipeline in N.P.

Nov 7th " " Giffard Rifle Range

Muelleria Vol. 8 No 3. May 1995. P. 291 Discussion of 2 varieties of P paleacea raised to species level.

2003 June In 7th ed. of Census there are two var of P. paleacea — P. paleacea var. sericea is now P. sericea & P paleacea var. williamsonii is now P. williamsonii.

Pultenaea Stricta — Rtdtg Rigid

1966 23rd Sept Flowering at Matingley Hill
30th Oct Still flowering.
1967 30th Sept Flowering at Matingley Hill
13th Oct " " - habertouche.
1969 May 24th Plants growing at Cape Paterson.
Sept 4th Flowering at Wilsons Prom.
Very like large form of P. Guanii.
leaves oval with tiny beak point
Dark shiny green above. Stipules Δ.
Leaf with deep channel where vein is.
Flower does not open as wide as
same Back of standard deeply marked
with red lines almost to edge of petal.
Keel very dark red, partly visible through
wings.
Nov 8th Flowering at Wilson's Prom.

Pultenaea subspicata

1970 Jan 25th Flowering on the Cobberas.
Soft green leaves - loose plant. Flowers with very short stalks. Low shrub. Flower heads fairly close together. Leaves tiny app 3 mm long inclined to curl upwards. Many leaves on plant & leaves spreading.
Identification by K. Rogers.

Pultenaea tenuella Delicate Bush-pea

1971 Jan 30th Flowering on plains at Howitt Springs. Small plant with tiny leaves but flowers big in comparison. Identified by Miss Galbraith.

1997 Jan 18th Flowering on Bentley's Plain.

Pultenaea. tenuifolia Slender Bush-pea

1996. Oct 12" Flowering at Paradise Beach near 2nd pipeline in N.P.
2601 Oct. 24 " " Dawson Reserve. This specimen did not seem to be typical as I had trouble keying it out until I went to Willis & in that key it missed the first mention in the key & keyed out to the second on P. 270. This was because the division to the two areas was whether flowers were auxiliary ~~or~~ mostly greater than 2 together or not immersed in imbricate bracts or flowers terminal solitary & calyx tube immersed in broad tightly imbricate bracts. This first mentioned part of the key applied to our specimen. From then on it applies & comes out at P tenuifolia. In brackets Willis describes it as a small procumbent shrub with terete leaves which is what our specimen was. Illustration on P. 755 Flora of Victoria Vol 3.

Pultenaea Weindorferi (Swamp)

1969 Oct 12th Flowering at Tyrong. Whole plant looks very like Daphne.

Flowers in tight terminal clusters with many leaves present. Flowers mostly yellow with soft red in the centres. Standard curved around not straight out, giving flower appearance of a bonnet.

Stem brown, stipules large and dark reddish brown, leaves darker on undersides & lighter on upper surface; slightly curved upwards, rounded at tip light yellowish green leaves, dense, pointed upwards giving the effect of a Dillwynia, covering the stem.

A very pretty plant.

Miss Galbraith's book says it grows in the Wandin, Bunyip districts in damp areas.

(Hyperanthus Nigricans) Pyrorchis nigricans

1966 Sept 9th First flower on stalk almost completely opened. Plants treated with phosphate were dug up by wombats.
Oct 9th Flowering in reserve.

1967 July 23rd. Bud well develop in leaf in A.P.M. Reserve.
Sept 17 Flowering in A.P.M Bush and Reserve
One plant had 5 buds and flowers
Oct 8th Flowering in APM Reserve

Scape: appr 16 cm high
2 leaf bracts & flower bracts to each flower 3 cm long 1.5 cm wide and curving right around flower & conspicuously veined. Many flowers on scape-have seen 5. Flower bracts higher than flower.

Dorsal Sepal: Very hooded - white with maroon continuous lines full length - 2 cm long 1.3 cm wide ∧ shape.

Lateral Petals: Maroon with white marks 1.8 cm long & 3mm wide - Coming forward to cross dorsal sepal.

Lateral Sepals: drooping about same size as petals.

Labellum: Dark very curved & fringed with white - curved backwards at point shorter than dorsal sepal & hidden by it.

Column 7mm hooded white striped with red - winged only slightly very dark ducks bill in front, pollenae behind duckbill & rostellum well up in curve & not visible from front. Pollenae also hidden by duckbill.

1969 Oct 12th Flowering along Tyrong North Rd.

1970 Sept 13th Plant with well developed bud in N.P.M. behind house near reserve.

1971 Aug 1st Plant with bud about 1" high but very sturdy.

Oct 10th Quite a number - app. 10 - plants flowering in small area in NPM reserve. Also another plant not far away. But this is all the plants we can find flowering. Can find no excuse why this group should all flower & yet leaves quite close by have no flowers at all. Some leaves are very large. If it was dry winter I assume it would affect all plants. These were the best specimens I have seen. Five flowers on a stalk and all lovely rotaist flowers. Plants had two leafbracts at base of stalk (not opposite). These leaf bracts were just like floral bracts but completely encircled the stem. Flowers & leaves with very deep colouring.

1995 Oct 28th Flowering in Wanthaggi Heathlands.

2003 June Name change in 7th ed. of Census

2003 Oct 25th Flowering on Big Tower Rd, Mullungdung

Pyrrosia rupestris — Rock Felt-fern

1972 July 9. Growing on rock faces at Billy Goat Bend.
July 22. . . . . + dead limbs at Fairy Dell. Miss Galbraith says this plant can die right down in dry seasons & short again after the rains. It has two different shaped leaves. The elongated one appears to carry the sori while the circular smaller ones appear barren with a felty appearance on the back.